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INTERNATIONAL JOINT COMMISSION

*Canada 1909 -*

# APPENDIX TO HEARINGS

ON THE REFERENCE BY THE UNITED STATES  
AND CANADA

IN RE

## LEVELS OF THE LAKE OF THE WOODS

AND ITS TRIBUTARY WATERS AND THEIR FUTURE  
REGULATION AND CONTROL

BEING

CERTAIN EXHIBITS AND OTHER PAPERS  
FILED WITH THE COMMISSION



WASHINGTON  
GOVERNMENT PRINTING OFFICE  
1916







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CANADA.

CHARLES A. MAGRATH, CHAIRMAN.  
HENRY A. POWELL, K. C.  
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LAWRENCE J. BURPEE, *Secretary.*

UNITED STATES.

OBADIAH GARDNER, CHAIRMAN.  
JAMES A. TAWNEY.  
R. B. GLENN.

WHITEHEAD KLUTZ, *Secretary.*



## APPENDIX.

### LIST OF STEAM VESSELS ON LAKE OF THE WOODS.

#### EXHIBIT R.

KENORA, ONTARIO, September 11, 1915.

*List showing the steam vessels now in commission on the Lake of the Woods, showing their respective tonnage and draft.*

Vessel.	Gross tonnage.	Draft.	Vessel.	Gross tonnage.	Draft.
		<i>Feet.</i>			<i>Feet.</i>
Kenora.....	486	7½	King Fisher.....	77	10
Clipper.....	53	6	Mather.....	146	11
Catherine S.....	67	6	Five Roses.....	44	9
Verbena.....	73	7	Forest B.....	88	8½
Argyle.....	78	7	Bessie B.....	54	6
Empress.....	192	9½	Daisy Moore.....	48	7
Rambler.....	25	5	Anoka.....	62	9
Actress.....	12	4½	John Miner.....	40	7
Standard.....	16	5	Janet B.....	20	6
Wanderer.....	20	4½	Wendigo.....	43	7
Helen S.....	13	5	Agwinda.....	307	3½
Scud.....	33	5	Redwing.....	23	5½
Rat Portage.....	14	4	Otter.....	16	5
Day Star.....	18	5	Rover.....	12	5
Nellie J.....	31	6½			

GEO. P. PHILLIPS, *Steamboat Inspector.*

### KENNEDY'S CHISELED HIGH-WATER MARKS.

#### EXHIBIT T.

No.	Location.	Date.	Height (feet) above water level.	Weather.	Water level.		Elevation, high-water mark.
					Keewatin.	Oak Island.	
		1913.					
1	Tunnel Island.....						{ 1,062.53
2	Island S 565 (D 91)....	June 17.....	1.50	Calm.....	{ 1,060.86		1,061.27
					{ 1,059.55		1,061.05
3	Flag Island Point.....	June 24.....	2.05	South wind.....		{ 1,060.96	1,063.01
						{ 1,059.65	1,061.7
4	Bucket Island.....	June 25.....	2.15	West wind.....		{ 1,060.76	1,062.91
						{ 1,059.45	1,061.6



*Kennedy's chiseled high-water marks—Continued.*

## HIGH-WATER MARK AT VARIOUS POINTS ON THE LAKE.

No.	Location.	Date.	Height (feet) above water level.	Weather.	Water level.		Elevation, high- water mark.
					Keewa- tin.	Oak Island.	
		1913.					
1	Thompson Island.....	June 18.....	1.94	Calm.....	(1,060.85 1,059.54	.....	1,062.81 1,061.5
2	Vicinity Davy's Rock .....	.....do.....	1.70	.....do.....	(1,060.85 1,059.54	.....	1,062.51 1,061.2
3	Southwest of Davy's Rock.....	.....do.....	1.72	.....do.....	(1,060.85 1,059.54	.....	1,062.61 1,061.3
4	West of Davy's Rock.....	.....do.....	1.52	.....do.....	(1,060.85 1,059.54	.....	1,062.41 1,061.1
6	Crow Rock.....	June 23.....	1.68	.....do.....	(1,060.97 1,059.66	.....	1,062.61 1,061.3
6(A)	.....do.....	.....do.....	1.70	.....do.....	(1,060.97 1,059.66	.....	1,062.71 1,061.4
6(B)	.....do.....	.....do.....	1.65	.....do.....	(1,060.97 1,059.66	.....	1,062.61 1,061.3
7	Vicinity Bishops Point.....	.....do.....	1.50	Southeast wind.....	(1,060.97 1,059.66	.....	1,062.51 1,061.2
8	Wendigo Island.....	June 25.....	1.80	West wind.....	.....	(1,060.76 1,059.45	1,062.61 1,061.3
9(A)	Falcon Island.....	.....do.....	1.80	.....do.....	.....	(1,060.76 1,059.45	1,062.61 1,061.3
	.....do.....	.....do.....	1.60	.....do.....	.....	(1,060.76 1,059.45	1,062.41 1,061.1
	.....do.....	.....do.....	1.70	.....do.....	.....	(1,060.76 1,059.45	1,062.51 1,061.2
10	.....do.....	.....do.....	1.65	.....do.....	.....	(1,060.76 1,059.45	1,062.41 1,061.1
11	.....do.....	.....do.....	1.62	.....do.....	.....	(1,060.76 1,059.45	1,062.41 1,061.1
12	French Portage.....	.....do.....	1.48	.....do.....	.....	(1,060.76 1,059.45	1,062.21 1,060.9
13	.....do.....	.....do.....	1.70	.....do.....	.....	(1,060.76 1,059.45	1,062.51 1,061.2
14	.....do.....	.....do.....	1.60	.....do.....	.....	(1,060.76 1,059.45	1,062.41 1,061.1
14(A)	Sunset Channel.....	.....do.....	1.60	.....do.....	.....	(1,060.76 1,059.45	1,062.41 1,061.1
15	Pewabic Island.....	June 26.....	1.65	North wind.....	(1,060.62 1,059.31	1,060.81 1,059.50	1,062.41 1,061.1
16	Long Bay.....	.....do.....	1.70	.....do.....	.....	.....	1,062.41 1,061.1
17	Entrance White Fish.....	.....do.....	1.67	.....do.....	.....	.....	1,062.41 1,061.1
18	Sioux Narrows.....	.....do.....	1.65	.....do.....	.....	.....	1,062.41 1,061.1
18(A)	.....do.....	.....do.....	1.70	.....do.....	.....	.....	1,062.41 1,061.1
19	Long Bay.....	.....do.....	1.80	.....do.....	.....	.....	1,062.51 1,061.2
20	.....do.....	.....do.....	1.80	.....do.....	.....	.....	1,062.51 1,061.2

Elevations referred to W. P. S. datum, Kenora.



**APPRAISALS OF STATE FLOWAGE LANDS, ST. LOUIS COUNTY.**

MINNESOTA EXHIBIT A.

STATE OF MINNESOTA,  
OFFICE OF THE AUDITOR OF STATE,

*St. Paul, January 28, 1916.*

I hereby certify that the attached copies or return of appraisers of State lands in townships 69, 70, and 71 north, ranges 19, 20, and 21 west, numbered 1 to 11, inclusive, are true copies of the record of such appraisals as filed in the office of the State auditor.

[SEAL.]

J. A. O. PREUS,  
*Auditor State of Minnesota.*



*Return of the appraisers of lands, St. Louis County, State of Minnesota.*

SCHOOL LANDS, TOWNSHIP 69 NORTH, RANGE 19 WEST.

[Figures in the waste-land column are the approximate acres of land that may be overflowed from high water on Kabotagama Lake. There is very little flowage on section 16. Hay has been cut and is now on the meadow on the SE.  $\frac{1}{4}$  SE.  $\frac{1}{4}$ ; has no appearance of having been overflowed.]

Parts of section.	Section.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp, and kind.	Acres of up-land.	Acres of timber.	Value of timber.	Acres of prairie.	Acres of meadow.	Acres of land flooded.	Im-prove-ments.	Value per acre.	Approximate acres subject to over-flow.
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ .	16	40.00	Poplar, birch, spruce, tamarack, pine, and jack pine.	Level to undulating high and rocky.	Sandy loam to swamp muck.	15; tamarack, wet, windfall.	25.00		\$545.00	None.	None.	None.	None.	\$5.00	.....
NW. $\frac{1}{4}$ NE. $\frac{1}{4}$ .	16	40.00	No timber, open burnt.	do.	do.	2; tamarack, wet, windfall.	38.00	None of value.		do.	do.	None.	do.	5.00	.....
SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ .	16	40.00	Poplar, birch, tamarack, and jack pine.	do.	do.	20; tamarack, wet, windfall.	20.00		100.00	do.	do.	None.	do.	5.00	.....
SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ .	16	40.00	do.	do.	do.	do.	20.00		10.00	do.	do.	None.	do.	5.00	.....
NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	16	40.00	Poplar, birch, spruce, tamarack, and jack pine.	do.	do.	None.	40.00		180.00	do.	do.	None.	do.	5.00	.....
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	16	40.00	do.	do.	do.	do.	40.00		240.00	do.	do.	None.	do.	5.00	.....
SE. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	16	40.00	do.	do.	do.	10; wet tamarack	30.00		190.00	do.	do.	None.	do.	5.00	.....
NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	16	40.00	do.	do.	do.	15; wet tamarack	20.00		200.00	do.	5; brush	None.	do.	5.00	.....
NW. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	16	40.00	do.	do.	do.	None.	35.00		140.00	do.	do.	None.	do.	5.00	.....
SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	16	40.00	do.	do.	do.	10; wet tamarack	30.00		75.00	do.	None.	None.	do.	5.00	.....
SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	16	40.00	Open burnt, no timber.	do.	Sandy loam.	None.	40.00	None of value.		do.	do.	None.	do.	5.00	.....
SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	16	40.00	do.	do.	Swamp muck to sandy loam.	do.	40.00	do.		do.	do.	2	do.	5.00	.....
NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	16	40.00	Poplar, birch, pine, and jack pine.	do.	do.	do.	35.00	do.	45.00	do.	5; brush.	None.	do.	5.00	.....
NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	16	40.00	do.	do.	do.	do.	20.00		220.00	do.	10; brush.	None.	do.	5.00	.....
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	16	40.00	do.	do.	do.	10; tamarack, windfall.	38.00		50.00	do.	2; brush.	10	do.	5.00	.....
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	16	40.00	do.	do.	do.	None.	30.00		40.00	do.	10; brush.	2	do.	5.00	.....



NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ lot 1.	36	39.95	Poplar, birch, tamarack, spruce, ash, pine, and jack pine.	.....do.....	Sandy loam to swamp muck.	5; wet tamarack.	30.00	.....	180.00	.....do.....	5; marsh meadow.	10	.....do.....	5.00	.....
NW. $\frac{1}{4}$ NE. $\frac{1}{4}$	36	40.00	.....do.....	do	do	2; wet tamarack.	38.00	.....	820.00	do	None	2	do	5.00	.....
SW. $\frac{1}{4}$ NE. $\frac{1}{4}$	36	40.00	.....do.....	do	do	20; wet tamarack	20.00	.....	230.00	do	do	20	do	5.00	.....
SE. $\frac{1}{4}$ NE. $\frac{1}{4}$	36	40.00	.....do.....	do	do	do	15.00	.....	410.00	do	do	20	do	5.00	.....
NE. $\frac{1}{4}$ NW. $\frac{1}{4}$	36	40.00	.....do.....	do	do	25; wet tamarack	20.00	.....	360.00	do	do	25	do	5.00	.....
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$	36	40.00	.....do.....	do	do	15; wet tamarack	25.00	.....	435.00	do	do	15	do	5.00	.....
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$	36	40.00	.....do.....	do	do	20; wet tamarack	20.00	.....	600.00	do	do	20	do	5.00	.....
SE. $\frac{1}{4}$ NW. $\frac{1}{4}$	36	40.00	.....do.....	do	do	10; wet tamarack	30.00	.....	280.00	do	do	10	do	5.00	.....
NE. $\frac{1}{4}$ SW. $\frac{1}{4}$	36	40.00	.....do.....	do	do	5; wet tamarack	35.00	.....	520.00	do	do	5	do	5.00	.....
NW. $\frac{1}{4}$ SW. $\frac{1}{4}$	36	40.00	.....do.....	do	do	10; tamarack and spruce.	30.00	.....	340.00	do	do	10	do	5.00	.....
SW. $\frac{1}{4}$ SW. $\frac{1}{4}$	36	40.00	.....do.....	do	do	15; tamarack and spruce.	25.00	.....	325.00	do	do	15	do	5.00	.....
SE. $\frac{1}{4}$ SW. $\frac{1}{4}$	36	40.00	.....do.....	do	do	15; open bog, wet	25.00	.....	535.00	do	do	15	do	5.00	.....
NE. $\frac{1}{4}$ SE. $\frac{1}{4}$	36	40.00	.....do.....	do	do	5; wet tamarack.	35.00	.....	220.00	do	do	5	do	5.00	.....
NW. $\frac{1}{4}$ SE. $\frac{1}{4}$	36	40.00	.....do.....	do	do	8; wet tamarack.	30.00	.....	180.00	do	2; marsh meadow.	10	do	5.00	.....
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$	36	40.00	.....do.....	do	do	None	30.00	.....	320.00	do	10; marsh meadow.	10	do	5.00	.....
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$	36	40.00	.....do.....	do	do	do	35.00	.....	240.00	do	5; marsh meadow.	5	do	5.00	.....
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ lot 3.	25	10.75	Poplar, birch, jack pine, and pine.	Level to high, rocky, and broken.	Sandy loam and swamp muck.	do	10.75	.....	175.00	do	None	1	do	5.00	.....
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ lot 9.	25	8.00	.....do.....	do	do	do	6.00	.....	20.00	do	2; marsh.	2	do	5.00	.....
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ lot 3.	26	35.50	.....do.....	do	do	10; open bog	15.50	.....	90.00	do	10; marsh.	20	do	5.00	.....
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ lot 4.	26	25.25	.....do.....	do	do	None	21.25	.....	70.00	do	5; marsh.	5	do	5.00	.....
W. $\frac{1}{4}$ SW. $\frac{1}{4}$ lot 5.	26	27.00	.....do.....	do	do	do	27.00	.....	140.00	do	None	2	do	5.00	.....
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$	27	40.00	Poplar, birch, cedar, spruce, tamarack, pine, and jack pine.	do	do	20; tamarack, wet.	20.00	.....	355.00	do	do	20	do	5.00	.....
SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ lot 4.	28	17.75	.....do.....	do	do	None	17.75	.....	235.00	do	do	2	do	5.00	.....
NW. $\frac{1}{4}$ SE. $\frac{1}{4}$	28	40.00	.....do.....	do	do	20; tamarack, wet.	20.00	.....	1,000.00	do	do	20	do	5.00	.....
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$	28	40.00	.....do.....	do	do	15; tamarack, wet.	25.00	.....	1,725.00	do	do	15	do	5.00	.....
NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ lot 7.	29	35.50	.....do.....	do	do	None	36.50	.....	220.00	do	do	1	do	5.00	.....
SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ lot 8.	29	39.25	.....do.....	do	do	do	39.25	.....	820.00	do	do	1	do	5.00	.....

## Return of the appraisers of lands, St. Louis County, State of Minnesota—Continued.

## SCHOOL LANDS, TOWNSHIP 69 NORTH, RANGE 19 WEST—Continued.

Parts of section.	Section.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp, and kind.	Acres of up-land.	Value of timber.	Acres of prairie.	Acres of meadow.	Acres of land flooded.	Im-prove-ments.	Value per acre.	Approximate acres subject to over-flow.
SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ lot 1.	29	40.00	Poplar, birch, cedar, spruce, tamarack, pine, and jack pine.	Level to high, rocky, and broke.	Sandy loam and swamp muck.	None.	30.00	\$220.00	None.	10; marsh.	10	None.	\$5.00	.....
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ , lot 9.	29	58.00	.....do.....	.....do.....	.....do.....	.....do.....	58.00	1,060.00	.....do.....	None.	1	.....do.....	5.00	.....
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ , lot 10.	29	23.00	.....do.....	.....do.....	.....do.....	.....do.....	23.00	720.00	.....do.....	.....do.....	1	.....do.....	5.00	.....
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 10.	22	40.00	.....do.....	.....do.....	.....do.....	.....do.....	40.00	920.00	.....do.....	.....do.....	None.	.....do.....	5.00	.....
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ , lot 1.	33	40.00	.....do.....	.....do.....	.....do.....	.....do.....	40.00	555.00	.....do.....	.....do.....	None.	.....do.....	5.00	.....

## STATE SWAMP LAND, TOWNSHIP 68 NORTH, RANGE 20 WEST.

NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 1.	4	30.72	Poplar, birch, pine, jack pine, tamarack, spruce, cedar.	Level to high, rocky and rolling.	Swamp muck to sandy loam.	20.72; wet; tamarack and cedar.	10.00	\$5.00	None.	None.	None.	None.	\$5.00	20.72
SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 1.	4	40.00	.....do.....	.....do.....	.....do.....	35.	5.00	85.00	.....do.....	.....do.....	None.	.....do.....	5.00	35.00
SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ , lot 1.	4	40.00	.....do.....	.....do.....	.....do.....	30.	10.00	225.00	.....do.....	.....do.....	None.	.....do.....	5.00	30.00
NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ , lot 1.	4	40.00	.....do.....	.....do.....	.....do.....	15.	25.00	322.00	.....do.....	.....do.....	None.	.....do.....	5.00	15.00
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ , lot 1.	4	40.00	.....do.....	.....do.....	.....do.....	25.	15.00	152.00	.....do.....	.....do.....	None.	.....do.....	5.00	25.00
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 1.	5	21.86	Poplar, birch, spruce, tamarack, cedar, and pine.	Low and level to undulating.	Sandy loam to swamp muck.	16.86; wet; tamarack and cedar.	5.00	None of value.	.....do.....	.....do.....	None.	.....do.....	5.00	16.86
NW. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 2.	5	20.59	.....do.....	.....do.....	.....do.....	5.59; wet; tamarack and cedar.	15.00	40.00	.....do.....	.....do.....	None.	.....do.....	5.00	20.59
SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 1.	5	40.00	.....do.....	.....do.....	.....do.....	30; wet; tamarack and cedar.	10.00	220.00	.....do.....	.....do.....	None.	.....do.....	5.00	30.00



SE. $\frac{1}{4}$ NE. $\frac{1}{4}$	5	40.00	do.	do.	do.	35; wet; tamarack and cedar.	5.00	110.00	do.	do.	None.	do.	5.00	35.00
NE. $\frac{1}{4}$ SE. $\frac{1}{4}$	5	40.00	do.	do.	do.	38; wet; tamarack and cedar.	2.00	65.00	do.	do.	None.	do.	5.00	38.00
NW. $\frac{1}{4}$ SE. $\frac{1}{4}$	5	40.00	do.	do.	do.	15; wet; tamarack and cedar.	25.00	90.00	do.	do.	None.	do.	5.00	15.00
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$	5	40.00	do.	do.	do.	10; wet; tamarack and cedar.	30.00	25.00	do.	do.	None.	do.	5.00	10.00
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$	5	40.00	do.	do.	do.	25; wet; tamarack and cedar.	15.00	20.00	do.	do.	None.	do.	5.00	25.00
NE. $\frac{1}{4}$ SW. $\frac{1}{4}$	6	40.00	Poplar, birch, pine, spruce, cedar, tamarack, and balsam.	Level to undulating to high and rocky.	Swamp muck to sandy loam.	35; wet; tamarack.	5.00	125.00	do.	do.	None.	do.	5.00	35.00
NW. $\frac{1}{4}$ SE. $\frac{1}{4}$	6	40.00	do.	do.	do.	20; wet; tamarack.	20.00	100.00	do.	do.	None.	do.	5.00	20.00
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$	6	40.00	do.	do.	do.	35; wet; tamarack.	5.00	60.00	do.	do.	None.	do.	5.00	35.00
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$	7	40.00	Pine, spruce, poplar, birch, cedar, and balsam.	Low and level to rolling and rocky.	Sandy loam to swamp muck.	30; wet; tamarack.	10.00	270.00	do.	do.	None.	do.	5.00	30.00
SE. $\frac{1}{4}$ SW. $\frac{1}{4}$	7	40.00	do.	do.	do.	20; wet; tamarack.	40.00	580.00	do.	do.	None.	do.	5.00	20.00
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$	8	40.00	Poplar, birch, tamarack, cedar, pine, and spruce.	Level to undulating.	do.	20; wet; tamarack.	20.00	300.00	do.	do.	None.	do.	5.00	20.00
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$	8	40.00	do.	do.	do.	30; wet; tamarack.	10.00	490.00	do.	do.	None.	do.	5.00	30.00
NW. $\frac{1}{4}$ SW. $\frac{1}{4}$	8	40.00	do.	do.	do.	25; wet; tamarack.	15.00	665.00	do.	do.	None.	do.	5.00	25.00
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$	9	40.00	Poplar, birch, tamarack, spruce, cedar and balsam.	do.	do.	38; wet; tamarack.	2.00	133.75	do.	do.	None.	do.	5.00	38.00
NW. $\frac{1}{4}$ NE. $\frac{1}{4}$	9	40.00	do.	do.	do.	30; wet; tamarack.	10.00	185.00	do.	do.	None.	do.	5.00	30.00
NE. $\frac{1}{4}$ NW. $\frac{1}{4}$	9	40.00	do.	do.	do.	40; wet; tamarack.		160.00	do.	do.	None.	do.	5.00	40.00
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$	9	40.00	do.	do.	do.	40; wet; tamarack.		40.00	do.	do.	None.	do.	5.00	40.00
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$	9	40.00	do.	do.	do.	30; wet; tamarack.	10.00	125.00	do.	do.	None.	do.	5.00	30.00

## Return of the appraisers of lands, St. Louis County, State of Minnesota—Continued.

## SCHOOL LAND, TOWNSHIP 68 NORTH, RANGE 20 WEST.

Parts of section.	Section.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp, and kind.	Acres of upland.	Acres of timber.	Value of timber.	Acres of prairie.	Acres of meadow.	Acres of land flooded.	Improvements.	Value per acre.	Approximate acres subject to overflow.
NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ , lot 3.	5	19.51	Poplar, birch, spruce, jack pine, cedar, and tamarack.	Level to undulating.	Sandy loam.	0.51; wet tamarack.	19.00	.....	\$25.00	None	None	None.	None.	\$5.00	19.51
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ , lot 4.	5	18.04	do.	do.	do.	do.	18.04	None of value.	.....	do.	do.	None.	do.	5.00	18.04
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	5	40.00	do.	do.	do.	do.	40.00	do.	90.00	do.	do.	None.	do.	5.00	40.00
SE. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	5	40.00	do.	do.	do.	do.	20.00	do.	200.00	do.	do.	None.	do.	5.00	40.00
NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	6	40.00	Poplar, birch, pine, spruce, cedar, tamarack, and balsam.	Level to undulating, high and rocky.	Swamp muck to sandy loam.	5; wet tamarack.	35.00	do.	125.00	do.	do.	None.	do.	5.00	20.00
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	6	40.00	do.	do.	do.	do.	10.00	do.	180.00	do.	do.	None.	do.	5.00	30.00
NW. $\frac{1}{4}$ NE. $\frac{1}{4}$ .	7	40.00	do.	Level to undulating.	do.	10; wet tamarack.	30.00	do.	185.00	do.	do.	None.	do.	5.00	10.00
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	8	40.00	Poplar, birch, tamarack, cedar, and spruce.	Level.	Swamp muck.	40.	.....	do.	420.00	do.	do.	None.	do.	5.00	40.00

## SCHOOL LAND, TOWNSHIP 69 NORTH, RANGE 21 WEST.

NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	7	40.00	Poplar, birch, tamarack, cedar, pine, ash, jack pine, spruce, and balsam.	Level to undulating.	Sandy loam to swamp muck.	35; wet tamarack and cedar.	5.00	.....	\$260.00	None	None	None.	None.	\$5.00	40.00
SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	7	40.00	do.	do.	do.	do.	15.00	do.	435.00	do.	do.	None.	do.	5.00	30.00
NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	7	40.00	do.	do.	do.	do.	39.00	do.	20.00	do.	do.	None.	do.	5.00	30.00
NW. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	7	40.00	do.	do.	do.	do.	25.00	do.	255.00	do.	do.	None.	do.	5.00	40.00
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	7	40.00	do.	do.	do.	do.	40.00	do.	261.25	do.	do.	None.	do.	5.00	20.00



## SCHOOL LAND, TOWNSHIP 69 NORTH, RANGE 20 WEST.

SE $\frac{1}{4}$ SE $\frac{1}{4}$	7	40.00	do.	Level to undulating to high rocky.	do. Sandy loam to s w a m p muck.	2 5; wet tamarack.	38.00	403.75	do.	do.	None.	do.	5.00	25.00
NE $\frac{1}{4}$ NW $\frac{1}{4}$	34	40.00	do.	Level to undulating to high rocky.	do. Sandy loam to s w a m p muck.	5; wet tamarack.	35.00	113.75	do.	do.	None.	do.	5.00	30.00
SW $\frac{1}{4}$ SW $\frac{1}{4}$	36	40.00	do.	Level to high and rocky.	do. Clay loam to s w a m p muck.	35; wet tamarack and ash.	5.00	40.00	do.	do.	None.	do.	5.00	35.00
SE $\frac{1}{4}$ SW $\frac{1}{4}$	36	40.00	do.	do.	do.	25.	15.00	30.00	do.	do.	No ne.	do.	5.00	25.00

## SWAMP LAND, TOWNSHIP 69, RANGE 20 WEST.

NE $\frac{1}{4}$ NE $\frac{1}{4}$	32	40.00	Very small poplar and birch, open burnt.	Level to undulating to high and rocky.	Clay loam to s w a m p muck.	None.	30.00	None of value.	None.	10; brush.	10.00	None.	\$5.00	.....
NW $\frac{1}{4}$ NE $\frac{1}{4}$	32	40.00	do.	do.	do.	do.	25.00	do.	do.	15; brush.	15.00	do.	5.00	.....
NE $\frac{1}{4}$ NW $\frac{1}{4}$ lot 1	32	35.00	do.	do.	do.	do.	10.00	do.	do.	25; brush.	25.00	do.	5.00	.....
NW $\frac{1}{4}$ NW $\frac{1}{4}$ lot 2	32	29.75	do.	do.	do.	do.	10.00	do.	do.	19.75; brush.	29.75	do.	5.00	.....
S $\frac{1}{4}$ NW $\frac{1}{4}$ lot 3	32	57.25	do.	do.	do.	do.	15.00	do.	do.	42.75; marsh meadow.	57.25	do.	5.00	.....
NE $\frac{1}{4}$ SW $\frac{1}{4}$ lot 3	32	40.00	do.	do.	do.	do.	35.00	do.	do.	5; marsh meadow.	5.00	do.	5.00	.....
NW $\frac{1}{4}$ SW $\frac{1}{4}$ lot 3	30	32.90	Birch, poplar, and pine.	Level to high rocky, and broken.	Clay loam to s w a m p muck.	30; muskeg.	9.90	.....	\$35.00	None.	30.00	None.	\$5.00	.....
SW $\frac{1}{4}$ SW $\frac{1}{4}$ lot 4	30	39.90	Birch and poplar.	do.	do.	34.90.	5.00	None of value.	.....	do.	34.90	do.	5.00	.....
NW $\frac{1}{4}$ NW $\frac{1}{4}$ lot 2	31	39.91	No timber; open muskeg.	Level.	Swamp muck.	39.91; muskeg.	None.	None.	.....	do.	39.91	do.	5.00	.....

## Return of the appraisers of lands, St. Louis County, State of Minnesota—Continued.

## SCHOOL LAND, TOWNSHIP 69 NORTH, RANGE 20 WEST.

Parts of section.	Section.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp, and kind.	Acres of upland.	Acres of timber.	Value of timber.	Acres of prairie.	Acres of meadow.	Acres of land flooded.	Improvements.	Value per acre.	Approximate acres subject to overflow.
NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ , lot 3.	13	22.75	Poplar, birch, pine, and jack pine.	Level to high, rocky and broken.	Clay loam to swamp muck.	None	20.75		\$75.00	None	1; brush.	5.00	None	\$5.00	
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ , lot 4.	13	40.75	do.	do.	do.	do.	40.00		85.00	do.	0.75.	5.00	do.	5.00	
SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 2.	14	24.25	Poplar, birch, tamarack, spruce, balsam, pine, and jack pine.	Level to undulating to high, rocky, and broken.	Clay loam.	do.	24.25		25.00	do.	None.	1.00	do.	5.00	
SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 1.	14	39.00	do.	do.	do.	do.	39.00		75.00	do.	do.	1.00	do.	5.00	
SE. $\frac{1}{4}$ NW. $\frac{1}{4}$ , lot 3.	14	42.25	do.	do.	do.	4.25; tamarack.	38.25		140.00	do.	do.	5.00	do.	5.00	
NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ , SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 2.	15	60.50	Poplar, birch, spruce, tamarack, pine, and jack pine.	Level to undulating to high, rocky and broken.	Clay loam to swamp muck.	3; white ash.	55.50		45.00	do.	2; brush.	10.00	do.	5.00	
SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 1.	15	26.75	do.	do.	do.	None	24.75		55.00	do.	do.	2.00	do.	5.00	
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ , lot 6.	15	10.25	do.	do.	Clay loam.	do.	10.25		35.00	do.	None.	1.00	do.	5.00	
NE. $\frac{1}{4}$ , lot 1.	21	53.00	Small poplar and birch, few pine trees.	Undulating to high, rocky, and broken.	do.	do.	53.00		245.00	do.	do.	5.00	do.	5.00	
SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ , SE. $\frac{1}{4}$ NW. $\frac{1}{4}$ , lot 2.	21	20.50	do.	do.	do.	do.	20.50		35.00	do.	do.	2.00	do.	5.00	
SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ , NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ , lot 4.	22	56.75	Poplar, birch, tamarack, spruce, cedar pine, ash, and elm.	Level to undulating to high and rocky.	Clay loam to swamp muck.	15; tamarack and spruce.	41.75		430.00	do.	do.	20.00	do.	5.00	
NW. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 5.	22	5.50	Poplar, birch, and pine.	do.	Clay loam.	None	5.50		35.00	do.	do.	.50	do.	5.00	



W 1 NE and NW sec. 4, lot 2	22	47.25	do	do	Swamp muck to clay loam.	5; tamarack and spruce.	42.25	190.00	do	do	5.00	do	5.00
NW 1 lot 2	22	38.00	do	do	Clay loam.	None	38.00	295.00	do	do	15.00	do	5.00
SW 1 NW 1 lot 6	22	10.00	do	do	do	do	10.00	70.00	do	do	5.00	do	5.00
SE 1 NE 1 NE 1 SE 1 lot 8	25	33.30	Poplar, birch, spruce, tam- arack, pine, and jack pine.	Level to high, rocky, and broken.	Clay loam to swamp muck.	5; tamarack.	33.50	290.00	do	do	5.00	do	5.00
SE 1 SW 1	27	40.00	Birch, poplar, spruce, and tamarack.	do	Swamp muck to clay loam.	30; tamarack.	10.00	100.00	do	do	30.00	do	5.00
W 1 NE 1 lot 2	28	55.75	burnt over pine and small brush.	do	Clay loam.	None	55.75	50.00	do	do	1.00	do	5.00
E 1 NW 1 lot 3	28	54.25	do	do	do	do	52.25	25.00	do	2; brush.	2.00	do	5.00
NW 1 NW 1 lot 6	28	13.25	do	do	do	do	13.25	None of value.	do	None	1.00	do	5.00
NE 1 SW 1 lot 5	28	39.25	Small burnt poplar and birch.	do	Clay loam to swamp muck.	do	25.00	do	do	14.25; brush.	14.25	do	5.00
SW 1 NW 1 lot 4	28	51.00	do	do	do	do	36.00	do	do	15; brush.	15.00	do	5.00
SE 1 NE 1 lot 1	29	31.95	Open burnt few small brush.	High, rocky, and broken.	Clay loam.	do	31.95	do	do	None	None	do	5.00
NE 1 SE 1	29	40.00	do	do	do	do	40.00	do	do	do	None	do	5.00
SW 1 SE 1	29	40.00	Few pine trees; small brush.	do	do	do	40.00	do	do	do	None	do	5.00
SE 1 SE 1 lot 1	31	39.85	Poplar, birch, and small tamarack.	Level to undu- lating to high rocky.	Clay loam to swamp muck.	do	40.00	do	do	do	None	do	5.00
NW 1 NE 1	31	40.00	do	do	do	25; wet tama- rack and mus- keg.	10.00	do	do	5; brush.	30.00	do	5.00
NE 1 NW 1	31	40.00	do	do	do	35; muskeg.	5.00	do	do	None	35.00	do	5.00
SE 1 NE 1	16	40.00	Poplar, birch, spruce, tam- arack, pine, and jack pine.	do	Sandy loam.	1; tamarack.	39.00	20.00	do	do	5.00	do	5.00
SW 1 NE 1 NW 1 SE 1 lot 3	16	57.00	do	do	do	None	57.00	35.00	do	do	5.00	do	5.00

## Return of the appraisers of lands, St. Louis County, State of Minnesota—Continued.

SCHOOL LANDS, TOWNSHIP 69 NORTH, RANGE 20 WEST—Continued.

Parts of section.	Section.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp, and kind.	Acres of upland.	Acres of timber.	Value of timber.	Acres of prairie.	Acres of meadow.	Acres of land flooded.	Improvements.	Value per acre.	Approximate acres subject to overflow.
SE $\frac{1}{4}$ NW $\frac{1}{4}$ , NE $\frac{1}{4}$ SW $\frac{1}{4}$ lot 1.	16	55.50	Poplar, birch, spruce, tamarack, pine, and jack pine. do.	Level to undulating to high and rocky. do.	Swamp muck to sandy loam. do.	2; tamarack. 10.	53.50 51.00	 None.	\$90.00 375.00	None do.	None do.	2.00 10.00	None do.	\$5.00 5.00	 
SW $\frac{1}{4}$ NW $\frac{1}{4}$ , NW $\frac{1}{4}$ SW $\frac{1}{4}$ lot 1.	16	61.00	do.	do.	do.	do.	51.00	None.							
NE $\frac{1}{4}$ SE $\frac{1}{4}$ , lot 4.	16	28.25	Small poplar and birch.	do.	do.	do.	28.25	None.				5.00	do.	5.00	
NE $\frac{1}{4}$ NE $\frac{1}{4}$ , lot 1.	36	11.00	Poplar, birch, spruce, tamarack, pine, jack, pine, and balsam.	do.	Sandy loam to swamp muck.	None.	10.00		55.00	do.	1; brush.	1.00	do.	5.00	
NW $\frac{1}{4}$ NE $\frac{1}{4}$ , lot 2.	36	26.75	do.	do.	do.	do.	21.75		75.00	do.	5; brush.	5.00	do.	5.00	
SW $\frac{1}{4}$ NE $\frac{1}{4}$ , SE $\frac{1}{4}$ NE $\frac{1}{4}$ , lot 3.	36 36	40.00 39.25	do. do.	do. do.	do. do.	do. do.	38.00 39.25		80.00 105.00	do. do.	2; brush. None.	5.00 5.00	do. do.	5.00 5.00	
NE $\frac{1}{4}$ NW $\frac{1}{4}$ , lot 1.	36	40.00	do.	do.	do.	30; low land, tamarack, and spruce. None.	10.00 40.00		90.00	do.	do.	30.00	do.	5.00	
SE $\frac{1}{4}$ NW $\frac{1}{4}$ , SE $\frac{1}{4}$ SW $\frac{1}{4}$ , lot 1.	36 32	40.00 40.00	do. Poplar, birch, spruce, tamarack, and cedar. do.	do. Level to high rocky and broken. do.	do. Clay loam. do.	None. do.	40.00 40.00	None of value.	70.00	do.	do.	10.00 None.	do. do.	5.00 5.00	35.00
NE $\frac{1}{4}$ SE $\frac{1}{4}$ , lot 1.	32	40.00	do.	do.	Clay loam to swamp muck.	15; wet tamarack.	25.00		30.00	do.	do.	None.	do.	5.00	20.00
NW $\frac{1}{4}$ SE $\frac{1}{4}$ , SW $\frac{1}{4}$ SE $\frac{1}{4}$ , SE $\frac{1}{4}$ SE $\frac{1}{4}$ , lot 1.	32 32 32	40.00 40.00 40.00	do. do. do.	do. do. do.	do. do. do.	5. 5. 5.	35.00 33.00 33.00		30.00 135.00 23.00	do. do. do.	do. do. do.	None. None. None.	do. do. do.	5.00 5.00 5.00	10.00 30.00 20.00



## SWAMP LAND, TOWNSHIP 69 NORTH, RANGE 21 WEST.

SE. 1/4 NE. 1/4, lot 1, SE. 1/4, and lot 2.	25	47.25	Poplar, birch, and pine.	Level to undulating to high, rocky, and broken.	Clay loam to s w a m p muck.	20; muskeg.	10.00		\$20.00	None.	17.25; marsh.	40.00	None.	\$5.00	.....
S. 1/4 SE. 1/4 lot 6, SW. 1/4 SW. 1/4, lot 3.	25 26	50.75 40.00	do. Poplar, birch, pine, and jack pine.	do. Level to undulating to high and rocky.	do. do.	30.75; muskeg. 5; tamarack.	20.00 25.00		105.00 35.00	do. do.	None. 10; marsh.	45.00 55.00	do. do.	5.00 6.00	.....
SE. 1/4 SW. 1/4 lot 4.	26	37.25	do.	do.	do.	None.	10.00		10.00	do.	27.25; marsh.	27.25	do.	6.00	.....
SW. 1/4 SE. 1/4.	26	40.00	do.	do.	do.	do.	10.00	None of value.		do.	30; marsh.	40.00	do.	8.00	.....
SE. 1/4 SW. 1/4 lot 5.	26	40.00	do.	do.	do.	do.	35.00		35.00	do.	5; marsh.	20.00	do.	5.00	.....
NE. 1/4 SE. 1/4, lot 6.	27	28.00	Poplar, birch, cedar, tamarack, pine, and jack pine.	Level to undulating to high, rocky, and broken.	Clay loam to s w a m p marsh.	do.	18.00	None of value.		do.	10; marsh.	20.00	do.	5.00	.....
N. 1/4 NE. 1/4, lot 1.	35	22.75	None.	Level.	Swamp muck.	do.	None.	do.		do.	22.75; marsh.	22.75	do.	7.00	.....
SW. 1/4 NE. 1/4, lot 6.	35	32.25	Small poplar and birch.	Level to undulating.	Clay loam to s w a m p muck.	do.	20.00	do.		do.	12.25; marsh.	30.00	do.	6.00	.....
SE. 1/4 NE. 1/4, lot 7.	35	18.50	do.	do.	do.	do.	None.	do.		do.	18.50; marsh.	18.50	do.	6.00	.....
NE. 1/4 NW. 1/4, lot 2.	35	18.50	do.	do.	do.	do.	None.	do.		do.	do.	18.50	do.	8.00	.....
NW. 1/4 NW. 1/4, lot 3.	35	34.50	Poplar, birch, cedar, tamarack, spruce, pine, and jack pine.	Level to undulating to high and rocky.	do.	do.	10.00	do.	15.00	do.	21.50.	30.50	do.	6.00	.....
SE. 1/4 NW. 1/4, lot 5.	35	35.25	Small poplar and birch.	do.	do.	do.	20.00	do.			15.25; marsh.	30.00	do.	6.00	.....
NE. 1/4 SE. 1/4.	35	40.00	do.	do.	do.	do.	5.00	do.			35.	35.00	do.	5.00	.....

## Return of the appraisers of lands, St. Louis County, State of Minnesota—Continued.

SCHOOL LAND, TOWNSHIP 69 NORTH, RANGE 21 WEST.

Parts of section.	Section.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp, and kind.	Acres of upland.	Acres of timber.	Value of timber.	Acres of prairie.	Acres of meadow.	Acres of land improved.	Improvements.	Value per acre.	Approximate acres subject to overflow.
N. $\frac{1}{2}$ SW. $\frac{1}{4}$ , lot 6.	1	49.00	Poplar, birch, pine, jack pine, spruce, cedar, tamarack, and balsam.	Level to high, rocky, and broken.	Clay loam to swamp muck.	None	49.00		\$1,000.00	None	None	10.00	None	\$5.00	
NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	1	40.00	do.	do.	do.	do.	140.00		170.00	do.	do.	10.00	do.	5.00	
NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	1	40.00	do.	do.	do.	5; tamarack.	35.00		510.00	do.	do.	10.00	do.	5.00	
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ , lot 7.	1	45.50	do.	do.	do.	10.50; tamarack.	35.00		915.00	do.	do.	10.50	do.	5.00	
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	1	40.00	do.	do.	do.	5; tamarack.	135.00		135.00	do.	do.	5.00	do.	5.00	
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ .	12	40.00	Poplar, birch, pine, and spruce.	Level to undulating, to high, rocky, and broken.	Clay loam.	None	40.00		165.00	do.	do.		do.	5.00	
NW. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 1.	12	31.75	do.	do.	do.	do.	31.75		110.00	do.	do.	5.00	do.	5.00	
SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 3.	12	22.25	do.	do.	do.	do.	22.25		145.00	do.	do.	10.00	do.	5.00	
NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ , lot 4.	12	34.50	do.	do.	do.	do.	29.50		55.00	do.	5; marsh.	10.00	do.	5.00	
NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ , lot 5.	12	22.25	do.	do.	do.	do.	22.25		35.00	do.	None	5.00	do.	5.00	
NW. $\frac{1}{4}$ SW. $\frac{1}{4}$ , lot 6.	12	5.50	Birch, scrub oak, and poplar.	do.	do.	do.	5.50	None of value.		do.	do.	2.00	do.	5.00	
N. $\frac{1}{4}$ NW. $\frac{1}{4}$ , lot 1.	4	2.75	Poplar, birch, oak, and small pine.	High and rocky.	do.	do.	2.75	do.		do.	do.	.75	do.	8.00	
NW. $\frac{1}{4}$ lot 2.	4	25.00	Poplar, birch, oak, and pine.	Level to high, rocky, and broken.	Swamp muck.	do.	15.00		35.00	do.	10.	20.00	do.	6.00	
NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ , lot 5.	4	17.25	Poplar, birch, and scrub oak.	do.	Clay loam.	do.	17.25	None of value.		do.	None	10.00	do.	6.00	



SW $\frac{1}{4}$ SW $\frac{1}{4}$ , lot 1	4	3.75	do.	do.	do.	do.	3.75	do.	do.	2.00	do.	8.00
NW $\frac{1}{4}$ NE $\frac{1}{4}$ , lot 1	5	3.50	Poplar, birch, and pine.	High, rocky, and broken.	do.	do.	3.50	do.	do.	1.00	do.	5.00
E $\frac{1}{4}$ NE $\frac{1}{4}$ , lot 2	5	17.25	do.	Level to un- dulating to high, rocky, and broken.	do.	do.	17.25	do.	do.	10.00	do.	8.00
E $\frac{1}{4}$ SE $\frac{1}{4}$ , lot 3	5	31.00	do.	do.	Clay loam to swamp muck.	do.	25.00	do.	6; marsh	20.00	do.	6.00
W $\frac{1}{4}$ SE $\frac{1}{4}$ , lot 4	5	51.00	do.	do.	do.	do.	41.00	do.	10; marsh	25.00	do.	6.00
NE $\frac{1}{4}$ NW $\frac{1}{4}$ , lot 1	8	27.00	Poplar, birch, spruce, and pine.	Undulating to high, rocky, and broken.	Clay loam.	do.	27.00	None of value.	None	17.00	do.	5.00
NW $\frac{1}{4}$ NW $\frac{1}{4}$ , lot 2	8	22.50	do.	Level and un- dulating to high and rocky.	Clay loam to swamp muck.	do.	5.00	do.	17.50; marsh	17.50	do.	5.00
SW $\frac{1}{4}$ NW $\frac{1}{4}$ , lot 1	9	40.00	do.	do.	do.	do.	35.00	do.	5; marsh	5.00	do.	5.00
SE $\frac{1}{4}$ NW $\frac{1}{4}$ , lot 5	9	40.00	do.	do.	do.	do.	39.00	do.	1; marsh	5.00	(?)	5.00
SW $\frac{1}{4}$ SW $\frac{1}{4}$ , lot 6	9	32.50	do.	do.	do.	do.	15.00	do.	17.50; marsh	17.50	None	6.00
NW $\frac{1}{4}$ NW $\frac{1}{4}$ , lot 1	9	3.75	Poplar, birch, ash, elm, scrub oak.	Undulating to high and rocky.	Clay loam.	do.	3.75	None of value.	None	1.75	do.	5.00
E $\frac{1}{4}$ SE $\frac{1}{4}$ , lot 2	9	8.00	do.	do.	do.	do.	8.00	do.	do.	4.00	do.	6.00
SE $\frac{1}{4}$ NE $\frac{1}{4}$ , lot 1	10	3.50	Poplar, birch, and pine.	Level to high and rocky.	do.	do.	3.50	do.	do.	1.50	do.	5.00
NW $\frac{1}{4}$ SW $\frac{1}{4}$ , lot 3	10	16.50	do.	do.	do.	do.	16.50	do.	do.	8.00	do.	5.00
SE $\frac{1}{4}$ SE $\frac{1}{4}$ , lot 2	11	1.50	do.	Undulating to high and rocky.	do.	do.	1.50	do.	do.	.50	do.	10.00

SWAMP LAND. TOWNSHIP 69. RANGE 21 WEST.

NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 1.	7	29.00	Poplar, birch, and 2 pine trees.	Level to un- dulating.	Swamp muck to clay loam.	None.....	10.00	.....	\$10.00	None..	19; marsh.....	19.00	None..\$5.00	.....
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High.

<sup>2</sup> Most of this tract is lake.

• Small hunter's house; frame building (\$50).

<sup>4</sup> Nice island for summer home.

*Return of the appraisers of lands, St. Louis County, State of Minnesota—Continued.*  
SCHOOL LAND, TOWNSHIP 69 NORTH, RANGE 21 WEST.

Parts of section.	Section.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp, and kind.	Acres of upland.	Acres of timber.	Value of timber.	Acres of prairie.	Acres of meadow.	Acres of land flooded.	Improvements.	Value per acre.	Approximate acres subject to overflow.
NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ , lot 1.	17	22.00	Poplar, birch, spruce, tamarack, ash, high and rocky.	Level to undulating to high and rocky.	Clay loam to swamp muck.	None.	22.00	.....	\$35.00	None.	None.	10.00	None	\$5.00	.....
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ , lot 2.	17	39.95	.....do.	.....do.	.....do.	.....do.	38.00	.....	10.00	.....do.	1.95; brush.	5.00	.....do.	5.00	.....
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	17	40.00	.....do.	.....do.	.....do.	.....do.	40.00	.....	165.00	.....do.	None.	10.00	.....do.	5.00	.....
SE. $\frac{1}{4}$ NW. $\frac{1}{4}$ , lot 3.	17	28.75	.....do.	.....do.	.....do.	.....do.	28.75	.....	75.00	.....do.	.....do.	10.00	.....do.	5.00	.....
NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	17	40.00	.....do.	.....do.	.....do.	.....do.	40.00	.....	320.00	.....do.	.....do.	10.00	.....do.	5.00	.....
SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	17	40.00	Poplar, birch, spruce, tamarack, elm, high, rocky, and broken.	Level to undulating to high, rocky, and broken.	Clay loam and swamp muck.	15; tamarack.	25.00	.....	295.00	.....do.	.....do.	30.00	.....do.	3.00	.....
NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	20	40.00	.....do.	.....do.	.....do.	.....do.	25.00	.....	30.00	.....do.	10; brush.	25.00	.....do.	3.00	.....
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	20	40.00	.....do.	.....do.	.....do.	.....do.	20.00	.....	740.00	.....do.	5; brush.	20.00	.....do.	5.00	.....
SE. $\frac{1}{4}$ NW. $\frac{1}{4}$ , lot 2.	20	52.50	.....do.	.....do.	.....do.	15; tamarack.	37.50	.....	10.00	.....do.	10; brush.	20.00	.....do.	5.00	.....
NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	20	40.00	Poplar, birch, and small jack pine.	.....do.	.....do.	None.	40.00	None of value.	.....	.....do.	None.	5.00	.....do.	5.00	.....
SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	20	40.00	Poplar, birch, pine, jack pine, tamarack, and cedar.	.....do.	.....do.	5; tamarack.	35.00	.....	30.00	.....do.	.....do.	15.00	.....do.	5.00	.....
E. $\frac{1}{2}$ SE. $\frac{1}{4}$ , lot 1.	21	43.75	Poplar, birch, spruce, ash, high and rocky, and broken.	Level to undulating to high and rocky, and broken.	.....do.	10; ash.	33.75	.....	275.00	.....do.	.....do.	10.00	.....do.	8.00	.....
SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ , lot 2.	22	8.75	Poplar, birch, and a few small pine.	Level to high, rocky, and broken.	Clay loam.	None.	8.75	.....	40.00	.....do.	.....do.	2.00	.....do.	10.00	.....



22	S. $\frac{1}{2}$ SE. $\frac{1}{4}$ , lot 1	do.	do.	do.	do.	5.25	None of value.	do.	do.	do.	3.00	do.	10.00	do.
25	SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ , NW. $\frac{1}{4}$ SE. lot 3.	Poplar, birch, and pine.	Level to un- drulating to high, rocky, and broken.	Clay loam to swamp muck.	do.	28.00	do.	do.	do.	10.75; brush.	20.00	do.	5.00	do.
25	NW. $\frac{1}{4}$ SW. $\frac{1}{4}$ , lot 4.	Poplar and birch.	do.	do.	do.	24.00	None of value.	do.	do.	None.	5.00	do.	5.00	do.
26	W. $\frac{1}{2}$ NW. $\frac{1}{4}$ , NW. $\frac{1}{4}$ SW. lot 1.	Poplar, birch, and small pine.	do.	do.	do.	41.00	do.	do.	do.	10; brush.	15.00	do.	7.00	do.
26	NW. $\frac{1}{4}$ SW. $\frac{1}{4}$ , SW. $\frac{1}{4}$ NW. lot 2.	do.	do.	do.	do.	32.50	do.	do.	do.	5; brush.	10.00	do.	7.00	do.
26	NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ , lot 6.	do.	do.	do.	do.	34.75	do.	do.	do.	None.	2.00	do.	5.00	do.
26	NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ , lot 3.	do.	do.	do.	do.	15.00	do.	do.	do.	8; brush.	8.00	do.	5.00	do.
27	NW. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 1.	Small poplar and birch.	Clay loam to swamp muck.	do.	do.	40.00	do.	do.	do.	0.75; brush.	5.00	do.	7.00	do.
27	SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 1.	do.	do.	do.	do.	11.75	do.	do.	do.	10.	15.00	do.	5.00	do.
27	SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 5.	do.	do.	do.	do.	15.00	do.	do.	do.	18.50; brush.	20.00	do.	5.00	do.
27	NW. $\frac{1}{4}$ NW. lot 2.	Poplar, birch, and pine.	do.	do.	do.	33.50	do.	do.	do.	None.	5.00	do.	7.00	do.
27	NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ , lot 1.	Small poplar and birch.	do.	do.	do.	39.00	do.	do.	do.	2; brush.	5.00	do.	5.00	do.
27	SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ , lot 1.	Poplar, birch, and pine, dead cedar, and tamarack.	do.	do.	do.	40.00	do.	do.	do.	None.	do.	do.	5.00	do.
27	SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ , lot 1.	do.	do.	do.	do.	25.00	do.	15; dead tama- rack.	do.	do.	20.00	do.	5.00	do.
36	NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 1.	Poplar, birch, ash, small.	Level to un- drulating to high to rocky and broken.	do.	do.	3.00	None of value.	25; muskeg.	do.	5; marsh.	30.00	do.	5.00	do.
36	W. $\frac{1}{2}$ NE. $\frac{1}{4}$ , lot 2.	do.	do.	do.	do.	44.75	do.	None.	do.	3.	5.00	do.	5.00	do.
36	SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ , lot 1.	do.	do.	do.	do.	30.00	do.	15; ash.	do.	None.	15.00	do.	5.00	do.
36	W. $\frac{1}{2}$ NW. $\frac{1}{4}$ , lot 2.	do.	do.	do.	do.	45.75	do.	None.	do.	10; brush.	15.00	do.	5.00	do.
36	W. $\frac{1}{2}$ NW. $\frac{1}{4}$ , lot 4.	No timber.	do.	do.	do.	6.00	do.	do.	do.	20; brush.	20.00	do.	6.00	do.
36	NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ , lot 5.	Poplar; birch, small.	do.	do.	do.	35.00	do.	do.	do.	5.	5.00	do.	5.00	do.
36	NW. $\frac{1}{4}$ SW. $\frac{1}{4}$ , lot 5.	do.	do.	do.	do.	5.00	do.	do.	do.	37.50.	37.50	do.	6.00	do.





**APPRAISALS OF STATE FLOWAGE LANDS, KOOCHICHING COUNTY.**

**MINNESOTA EXHIBIT B.**

STATE OF MINNESOTA,  
OFFICE OF THE AUDITOR OF STATE,  
*St. Paul, January 28, 1916.*

I hereby certify that the attached copies of return of appraisers of State lands in townships 69, 70, and 71 north, ranges 22 and 23 west, numbered 1 to 16, inclusive, are true copies of the record of such appraisals as filed in the office of the State auditor.

[SEAL.]

J. A. O. PREUS,  
*Auditor State of Minnesota.*

## Return of the appraisers of Koochiching County, Minn.

TOWNSHIP 69 NORTH, RANGE 22 WEST.

Parts of section.	Section.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp and kind.	Acres of up-land.	Acres of timber.	Value of timber.	Acres of prairie.	Acres of meadow.	Acres of land flooded.	Im- prove- ments.	Value per acre.	Remarks.
Lot 1.....	1	32.39	Cat spruce.....	Level.....	Muskeg.....	32.39; cat spruce.....	0	0	0	0	0	32.39	None.....	\$5.00	
Lot 4.....	1	43.00	do.....	do.....	do.....	43; cat spruce.....	0	0	0	0	0	43.00	do.....	5.00	
Lot 2.....	1	26.81	do.....	do.....	do.....	26.81; cat spruce.....	0	0	0	0	0	26.81	do.....	5.00	
Lot 3.....	1	27.34	do.....	do.....	do.....	20; cat spruce.....	7.34	10.00	\$50.00	0	0	0	do.....	5.00	Back water may prevent drainage.
SW $\frac{1}{4}$ NW $\frac{1}{4}$ .....	1	40.00	do.....	do.....	do.....	40; cat spruce.....	0	0	0	0	0	0	do.....	5.00	Do.
SE $\frac{1}{4}$ NW $\frac{1}{4}$ .....	1	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	40.00	do.....	5.00	Do.
Lot 5.....	1	25.80	Poplar, spruce, tamarack.	do.....	do.....	10; willow.....	15.80	0	0	0	0	25.80	do.....	5.00	Do.
NW $\frac{1}{4}$ SW $\frac{1}{4}$ .....	1	40.00	Spruce and tamarack.	do.....	do.....	40; tamarack and spruce.	0	0	0	0	0	40.00	do.....	5.00	
Lot 6.....	1	39.40	Poplar, willow, and alder.	do.....	Black loam.....	None.....	39.40	0	0	0	0	39.40	do.....	5.00	
Lot 1.....	2	28.05	Spruce and tamarack.	do.....	Muskeg.....	28.05; spruce and tamarack.	0	10.00	50.00	0	0	0	do.....	5.00	Do.
Lot 2.....	2	28.95	do.....	do.....	do.....	28.95; spruce and tamarack.	0	0	0	0	0	0	do.....	5.00	Do.
SW $\frac{1}{4}$ NE $\frac{1}{4}$ .....	2	40.00	do.....	do.....	do.....	40; spruce and tamarack.	0	0	0	0	0	0	do.....	5.00	Do.
SE $\frac{1}{4}$ NE $\frac{1}{4}$ .....	2	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	0	do.....	5.00	Do.
Lot 3.....	2	29.85	do.....	do.....	do.....	29.85; spruce and tamarack.	0	0	0	0	0	0	do.....	5.00	Do.
Lot 4.....	2	30.75	do.....	do.....	do.....	30.75; spruce and tamarack.	0	0	0	0	0	0	do.....	5.00	Do.
SW $\frac{1}{4}$ NW $\frac{1}{4}$ .....	2	40.00	do.....	do.....	do.....	40; spruce and tamarack.	0	0	0	0	0	0	do.....	5.00	Do.
SE $\frac{1}{4}$ NW $\frac{1}{4}$ .....	2	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	0	do.....	5.00	Do.
NW $\frac{1}{4}$ SW $\frac{1}{4}$ .....	2	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	0	do.....	5.00	Do.
SW $\frac{1}{4}$ SW $\frac{1}{4}$ .....	2	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	0	do.....	5.00	Do.
SE $\frac{1}{4}$ SW $\frac{1}{4}$ .....	2	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	0	do.....	5.00	Do.
NE $\frac{1}{4}$ SE $\frac{1}{4}$ .....	2	40.00	do.....	do.....	do.....	25; spruce and tamarack.	15.00	20.00	50.00	0	0	0	do.....	5.00	Timber is all dead from water.



	2	40.00	do.	do.	do.	40; spruce and tamarack.	0	0	0	0	0	do.	5.00	Back water may prevent drainage.
NW 1 SE 1	2	40.00	do.	do.	do.	30; spruce and tamarack.	10.00	0	0	0	0	do.	5.00	
SW 1 SE 1	2	40.00	Poplar, tamarack and spruce.	do.	do.	20; spruce and tamarack.	20.00	0	0	0	0	do.	5.00	
SE 1 SE 1	2	40.00	do.	do.	do.	31.52; tamarack and spruce.	0	0	0	0	0	do.	5.00	Do.
Lot 1	3	31.52	Tamarack and spruce.	do.	do.	31.18; tamarack and spruce.	0	0	0	0	0	do.	5.00	Do.
Lot 2	3	31.18	do.	do.	do.	40; tamarack and spruce.	0	0	0	0	0	do.	5.00	Do.
SW 1 NE 1	3	40.00	do.	do.	do.	32.82; tamarack and spruce.	0	0	0	0	0	do.	5.00	Do.
SE 1 NE 1	3	40.00	do.	do.	do.	20; tamarack and cedar.	20.00	150.00	0	0	0	do.	5.00	Do.
Lot 3	3	32.82	do.	do.	do.	40; tamarack and spruce.	13.48	20.00	300.00	0	0	do.	5.00	Do.
Lot 4	3	33.48	Tamarack and cedar.	do.	do.	Muskeg and rocky.	0	0	0	0	0	do.	5.00	Do.
SE 1 NW 1	3	40.00	Tamarack and spruce.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SW 1 NW 1	3	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NE 1 SW 1	3	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SE 1 SW 1	3	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SE 1 SE 1	3	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NE 1 SE 1	3	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SW 1 SE 1	3	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NE 1 SE 1	3	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
Lot 1	4	34.26	Spruce and cedar.	do.	do.	25; spruce and cedar.	9.26	20.00	300.00	0	0	do.	5.00	Do.
Lot 2	4	35.19	do.	do.	do.	30; spruce and cedar.	5.19	20.00	250.00	0	0	do.	5.00	Do.
SW 1 NE 1	4	40.00	Tamarack and spruce.	do.	do.	40; tamarack and spruce.	0	0	0	0	0	do.	5.00	Do.
SE 1 NE 1	4	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
Lot 3	4	36.11	Cat spruce.	do.	do.	36.11; cat spruce.	0	0	0	0	0	do.	5.00	Do.
Lot 4	4	37.04	do.	do.	do.	37.04 cat spruce.	0	0	0	0	0	do.	5.00	Do.
SW 1 NW 1	4	40.00	do.	do.	do.	40; cat spruce.	0	0	0	0	0	do.	5.00	Do.
SE 1 NW 1	4	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NE 1 SW 1	4	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NW 1 SW 1	4	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SW 1 SW 1	4	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SE 1 SW 1	4	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NE 1 SE 1	4	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NW 1 SE 1	4	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SE 1 SE 1	4	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SE 1 SE 1	4	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
Lot 1	5	38.04	do.	do.	do.	38.04; cat spruce.	0	0	0	0	0	do.	5.00	Do.
Lot 2	5	39.11	do.	do.	do.	39.11; cat spruce.	0	0	0	0	0	do.	5.00	Do.

## Return of the appraisers of Koochiching County, Minn.—Continued.

TOWNSHIP 69 NORTH, RANGE 22 WEST—Continued.

Parts of section.	Section.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp and kind.	Acres of up-land.	Acres of timber.	Value of timber.	Acres of prairie.	Acres of flood- ed.	In- pro- vements.	Value per acre.	Remarks.
SW, $\frac{1}{4}$ NE, $\frac{1}{4}$ .	5	40.00	Tamarack and spruce.	Level...	Muskeg.....	40; cat spruce.....	0	0	0	0	0	None....	\$5.00	Back water may prevent drainage.
SE, $\frac{1}{4}$ NE, $\frac{1}{4}$ .	5	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
Lot 3.....	5	40.19	do.	do.	do.	40.19; cat spruce.	0	0	0	0	0	do.	5.00	Do.
Lot 4.....	5	41.26	do.	do.	do.	41.26; cat spruce.	0	0	0	0	0	do.	5.00	Do.
SW, $\frac{1}{4}$ NW, $\frac{1}{4}$ .	5	40.00	do.	do.	do.	40; cat spruce.	0	0	0	0	0	do.	5.00	Do.
SE, $\frac{1}{4}$ NW, $\frac{1}{4}$ .	5	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NE, $\frac{1}{4}$ SW, $\frac{1}{4}$ .	5	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NW, $\frac{1}{4}$ SW, $\frac{1}{4}$ .	5	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SE, $\frac{1}{4}$ SW, $\frac{1}{4}$ .	5	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NE, $\frac{1}{4}$ SE, $\frac{1}{4}$ .	5	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NW, $\frac{1}{4}$ SE, $\frac{1}{4}$ .	5	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SW, $\frac{1}{4}$ SE, $\frac{1}{4}$ .	5	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SE, $\frac{1}{4}$ SE, $\frac{1}{4}$ .	5	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
Lot 1.....	6	42.43	do.	do.	do.	42.43; cat spruce.	0	0	0	0	0	do.	5.00	Do.
Lot 2.....	6	43.68	do.	do.	do.	43.68; cat spruce.	0	0	0	0	0	do.	5.00	Do.
SW, $\frac{1}{4}$ NE, $\frac{1}{4}$ .	6	40.00	do.	do.	do.	40; cat spruce.	0	0	0	0	0	do.	5.00	Do.
SE, $\frac{1}{4}$ NE, $\frac{1}{4}$ .	6	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
Lot 4.....	6	52.54	Poplar, spruce, tamarack.	do.	Muskeg and sandy.	30; spruce and tamarack.	22.54	22.54	\$150.00	0	0	do.	5.00	Do.
Lot 5.....	6	45.22	Cat spruce.	do.	Spruce muskeg	45.22; cat spruce.	0	0	0	0	0	do.	5.00	Do.
SE, $\frac{1}{4}$ NW, $\frac{1}{4}$ .	6	40.00	do.	do.	do.	40; cat spruce.	0	0	0	0	0	do.	5.00	Do.
NE, $\frac{1}{4}$ SW, $\frac{1}{4}$ .	6	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
Lot 6.....	6	45.05	do.	do.	do.	45.05; cat spruce.	0	0	0	0	0	do.	5.00	Do.
Lot 7.....	6	44.88	Poplar, spruce, tamarack.	do.	Muskeg and sandy.	10; cat spruce.	34.88	34.88	25.00	0	0	do.	5.00	Do.
SE, $\frac{1}{4}$ SW, $\frac{1}{4}$ .	6	40.00	Cat spruce.	do.	Spruce muskeg	40; cat spruce.	0	0	0	0	0	do.	5.00	Do.
NE, $\frac{1}{4}$ SE, $\frac{1}{4}$ .	6	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NW, $\frac{1}{4}$ SE, $\frac{1}{4}$ .	6	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SW, $\frac{1}{4}$ SE, $\frac{1}{4}$ .	6	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SE, $\frac{1}{4}$ SE, $\frac{1}{4}$ .	7	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NE, $\frac{1}{4}$ NE, $\frac{1}{4}$ .	7	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NW, $\frac{1}{4}$ NE, $\frac{1}{4}$ .	7	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SE, $\frac{1}{4}$ NE, $\frac{1}{4}$ .	7	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NE, $\frac{1}{4}$ NW, $\frac{1}{4}$ .	7	40.00	Poplar, spruce, tamarack.	do.	Sandy loam.	35; cat spruce.	5.00	5.00	25.00	0	0	do.	5.00	Do.
Lot 1.....	7	44.90	do.	do.	do.	20; cat spruce.	24.90	24.00	100.00	0	0	do.	5.00	Do.

[illegible]



## Return of the appraisers of Koochiching County, Minn.—Continued.

TOWNSHIP 69 NORTH, RANGE 22 WEST—Continued.

Parts of section.	Sec- tion.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp, and kind.	Acres of up- land.	Acres of tim- ber.	Value of tim- ber.	Acres of prairie.	Acres of meadow.	Acres of land flood- ed.	Im- prove- ments.	Value per acre.	Remarks.
Lot 1.....	11	11.50	.....	Rolling..	Black muck..	None.....	0	0	0	0	11.50	11.50	None.....	\$7.00	Back water may prevent drainage. Do. Timber is all dead from water.
Lot 2.....	11	11.90	.....	do.....	do.....	do.....	0	0	0	0	11.90	11.90	do.....	7.00	
Lot 3.....	11	39.00	.....	do.....	do.....	do.....	0	0	0	0	39.00	39.00	do.....	7.00	
NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ ..	11	40.00	Cat spruce..	do.....	Black muck muskeg.	25; cat spruce..	15.00	10.00	\$25.00	0	10.00	10.00	do.....	5.00	
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ ..	11	40.00	do.....	do.....	Muskeg.....	40; cat spruce..	0	0	0	0	0	.....	do.....	5.00	Back water may prevent drainage. Do. Timber is all dead from water.
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ ..	11	40.00	do.....	do.....	do.....	do.....	0	10.00	25.00	0	0	.....	do.....	5.00	
SE. $\frac{1}{4}$ NW. $\frac{1}{4}$ ..	11	40.00	Poplar, spruce, and tamarack.	do.....	Black muck..	30; spruce and tamarack.	0	10.00	25.00	0	0	40.00	do.....	5.00	
Lot 3.....	12	23.00	do.....	do.....	do.....	do.....	0	0	0	0	23.00	23.00	do.....	7.00	
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ ..	17	40.00	Spruce and tam- arack.	do.....	Muskeg and sandy loam.	30; tamarack and spruce.	10.00	0	0	0	0	.....	do.....	5.00	Back water may prevent drainage. Do. Timber is un- der permit. Back water may prevent drainage.
NW. $\frac{1}{4}$ NE. $\frac{1}{4}$ ..	17	40.00	do.....	do.....	do.....	40; tamarack and spruce.	0	0	0	0	0	.....	do.....	5.00	
SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ ..	17	40.00	Pine, spruce, ce- dar, tamarack.	Rolling..	Sandy loam..	25; tamarack and cedar.	15.00	40.00	Sold.	0	0	.....	do.....	5.00	
NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ ..	17	40.00	Cat spruce..	Level..	Spruce muskeg	40; cat spruce..	0	0	0	0	0	.....	do.....	5.00	
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ ..	17	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	.....	do.....	5.00	Timber is un- der permit. Back water may prevent drainage. Do. Timber is un- der permit. Do. Back water may prevent drainage; un- der permit. Do.
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ ..	17	40.00	Spruce and tam- arack.	do.....	do.....	40; spruce and tamarack.	0	10.00	Sold.	0	0	.....	do.....	5.00	
SE. $\frac{1}{4}$ NW. $\frac{1}{4}$ ..	17	40.00	do.....	do.....	do.....	do.....	0	20.00	Sold.	0	0	.....	do.....	5.00	
NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ ..	17	40.00	Pine, spruce, tamarack, cedar	Rolling..	Sandy loam..	None.....	40.00	40.00	Sold.	0	0	.....	do.....	5.00	
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ ..	18	40.00	Spruce, tamar- rack, cedar.	Level..	Muskeg.....	35; spruce and tamarack.	5.00	10.00	Sold.	0	0	.....	do.....	5.00	Back water may prevent drainage; un- der permit. Do.
SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ ..	18	40.00	do.....	do.....	do.....	40; tamarack and spruce.	0	5.00	Sold.	0	0	.....	do.....	5.00	

## TOWNSHIP 70 NORTH, RANGE 22 WEST.

Lot 4.....	4	34.75	None.....	Level.....	Black, muck.....	None.....	0	0	0	0	34.75	34.75	Time.....	\$2.00
Lot 5.....	4	25.50	do.....	do.....	do.....	do.....	0	0	0	0	25.50	25.50	do.....	7.00
NE $\frac{1}{4}$ SW $\frac{1}{4}$ .....	5	40.00	Spruce and tamarack.....	Rolling.....	Sandy and black muck.....	20; spruce and tamarack.....	20.00	20.00	\$50.00	0	0	20.00	do.....	5.00
NW $\frac{1}{4}$ SW $\frac{1}{4}$ .....	5	40.00	Jack pine, spruce, tamarack.....	do.....	do.....	25; willow and alder.....	15.00	15.00	25.00	0	0	25.00	do.....	6.00
Lot 5.....	5	39.50	Willow and alder.....	Level.....	Black muck.....	39.50; willow and alder.....	0	0	0	0	0	39.50	do.....	5.00
Lot 6.....	5	25.75	do.....	do.....	do.....	25.75; willow and alder.....	0	0	0	0	0	25.75	do.....	5.00
Lot 7.....	5	25.75	do.....	do.....	do.....	do.....	0	0	0	0	0	25.75	do.....	5.00
Lot 8.....	5	35.00	do.....	do.....	do.....	35; willow and alder.....	0	0	0	0	0	35.00	do.....	5.00
NE $\frac{1}{4}$ NE $\frac{1}{4}$ .....	7	40.00	Jack pine, spruce, poplar, and cedar.....	Rolling.....	Black muck and rocky.....	25; willow and alder.....	15.00	15.00	25.00	0	0	25.00	do.....	5.00
SW $\frac{1}{4}$ NE $\frac{1}{4}$ .....	7	40.00	Spruce, poplar, and cedar.....	do.....	do.....	10; willow and alder.....	30.00	30.00	25.00	0	0	10.00	do.....	5.00
SE $\frac{1}{4}$ NE $\frac{1}{4}$ .....	7	40.00	Willow and alder.....	Level.....	Black muck.....	40; willow and alder.....	0	0	0	0	0	40.00	do.....	5.00
Lot 5.....	7	39.00	do.....	do.....	do.....	39; willow and alder.....	0	0	0	0	0	39.00	do.....	5.00
Lot 3.....	7	42.00	do.....	do.....	do.....	42.60; willow and alder.....	0	0	0	0	0	42.60	do.....	5.00
Lot 4.....	7	53.40	do.....	do.....	do.....	53.40; willow and alder.....	0	0	0	0	0	53.40	do.....	5.00
Lot 7.....	7	27.75	do.....	do.....	do.....	27.75; willow and alder.....	0	0	0	0	0	27.75	do.....	5.00
Lot 6.....	7	45.00	do.....	do.....	do.....	45; willow and alder.....	0	0	0	0	0	45.00	do.....	5.00
Lot 8.....	7	10.25	do.....	do.....	do.....	10.25; willow and alder.....	0	0	0	0	0	10.25	do.....	5.00
Lot 3.....	8	35.25	do.....	do.....	do.....	35.25; willow and alder.....	0	0	0	0	0	35.25	do.....	6.00
NW $\frac{1}{4}$ NW $\frac{1}{4}$ .....	8	40.00	do.....	do.....	do.....	40; willow and alder.....	0	0	0	0	0	40.00	do.....	6.00
SW $\frac{1}{4}$ NW $\frac{1}{4}$ .....	8	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	40.00	do.....	6.00
Lot 5.....	8	21.00	do.....	do.....	do.....	21; willow and alder.....	0	0	0	0	0	21.00	do.....	6.00
Lot 4.....	8	29.50	do.....	do.....	do.....	29.50; willow and alder.....	0	0	0	0	0	29.50	do.....	6.00
Lot 1.....	10	29.00	Poplar and jack pine.....	Rolling.....	Black muck and rocky.....	None.....	4.00	0	0	0	0	25.00	do.....	6.00
SE $\frac{1}{4}$ NE $\frac{1}{4}$ .....	10	40.00	None.....	Level.....	pine.....	35; open muskeg.....	5.00	0	0	0	0	35.00	do.....	5.00
SW $\frac{1}{4}$ NE $\frac{1}{4}$ .....	11	40.00	Spruce, tamarack, poplar.....	Rolling.....	Muskeg and rocky.....	25; open muskeg.....	15.00	15.00	25.00	0	0	25.00	do.....	5.00
SE $\frac{1}{4}$ NE $\frac{1}{4}$ .....	11	40.00	do.....	do.....	do.....	30; cut spruce.....	10.00	10.00	25.00	0	0	30.00	do.....	5.00

## Return of the appraisers of Koochiching County, Minn.—Continued.

TOWNSHIP 70 NORTH, RANGE 22 WEST—Continued.

Parts of section.	Section.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp, and kind.	Acres of up-land.	Acres of timber.	Value of timber.	Acres of prairie.	Acres of meadow.	Acres of land flooded.	Im- prove- ments.	Value per acre.	Remarks.
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	11	40.00	Poplar, bush, willow, and alder.	Level...	Black muck...	35; willow and al- der.	5.00	0	0	0	0	35.00	None...	\$5.00	
Lot 2	11	41.75	None...	do...	Mus'eg...	41.75; open mus'eg...	0	0	0	0	0	41.75	do...	5.00	
Lot 1	11	23.25	Poplar and jack pine.	do...	do...	20; open mus'eg...	3.75	0	0	0	0	20.00	do...	5.00	
NE. $\frac{3}{4}$ SE. $\frac{1}{4}$	11	40.00	None...	do...	do...	40; open mus'eg...	0	0	0	0	0	40.00	do...	5.00	
Lot 3	11	53.50	do...	do...	do...	53.50; open mus'eg...	0	0	0	0	0	53.50	do...	5.00	
Lot 4	11	31.50	do...	do...	do...	31.50; open mus'eg...	0	0	0	0	0	31.50	do...	5.00	
SE. $\frac{1}{4}$ NE. $\frac{1}{4}$	11	40.00	do...	do...	do...	40; open mus'eg...	0	0	0	0	0	40.00	do...	5.00	
SW. $\frac{1}{4}$ NE. $\frac{1}{4}$	12	40.00	do...	do...	do...	do...	0	0	0	0	0	40.00	do...	5.00	
NE. $\frac{1}{4}$ NW. $\frac{1}{4}$	12	40.00	Poplar, spruce, tamarack.	do...	Sandy mus'eg	20; spruce and tamarack.	20.00	20.00	\$25.00	0	0	20.00	do...	5.00	
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$	12	40.00	do...	do...	do...	do...	20.00	0	0	0	0	20.00	do...	5.00	
SE. $\frac{1}{4}$ NW. $\frac{1}{4}$	12	40.00	do...	do...	do...	30; spruce and tamarack.	10.00	0	0	0	0	30.00	do...	5.00	
NE. $\frac{1}{4}$ SW. $\frac{1}{4}$	12	40.00	None...	do...	Mus'eg...	40; open mus'eg...	0	0	0	0	0	40.00	do...	5.00	
NW. $\frac{1}{4}$ SW. $\frac{1}{4}$	12	40.00	do...	do...	do...	do...	0	0	0	0	0	40.00	do...	5.00	
SE. $\frac{1}{4}$ SW. $\frac{1}{4}$	12	40.00	do...	do...	do...	do...	0	0	0	0	0	40.00	do...	5.00	
NE. $\frac{1}{4}$ SE. $\frac{1}{4}$	12	40.00	do...	do...	do...	do...	0	0	0	0	0	40.00	do...	5.00	
NW. $\frac{1}{4}$ SE. $\frac{1}{4}$	12	40.00	do...	do...	do...	do...	0	0	0	0	0	40.00	do...	5.00	
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$	12	40.00	do...	do...	do...	do...	0	0	0	0	0	40.00	do...	5.00	
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$	12	40.00	do...	do...	do...	do...	0	0	0	0	0	40.00	do...	5.00	
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$	13	40.00	Poplar and spruce.	do...	do...	35; open mus'eg...	5.00	0	0	0	0	35.00	do...	5.00	
NW. $\frac{1}{4}$ NE. $\frac{1}{4}$	13	40.00	None...	do...	do...	40; open mus'eg...	0	0	0	0	0	40.00	do...	5.00	
SE. $\frac{1}{4}$ NE. $\frac{1}{4}$	13	40.00	do...	do...	do...	None...	0	0	0	0	0	40.00	do...	7.00	
Lot 1	13	34.50	do...	do...	do...	do...	0	0	0	0	0	34.50	do...	7.00	
Lot 2	13	13.25	do...	do...	do...	do...	0	0	0	0	0	13.25	do...	7.00	
Lot 3	13	13.25	do...	do...	do...	do...	0	0	0	0	0	13.25	do...	7.00	
Lot 5	13	37.00	do...	do...	do...	do...	0	0	0	0	0	37.00	do...	7.00	
Lot 4	13	58.25	do...	do...	do...	do...	0	0	0	0	0	58.25	do...	7.00	
Lot 3	14	16.00	Willow and alder	do...	do...	do...	0	0	0	0	0	16.00	do...	7.00	
Lot 5	14	16.00	do...	do...	do...	16; willow and alder	0	0	0	0	0	16.00	do...	7.00	
Lot 3	15	27.25	do...	do...	do...	27.25; willow and alder.	0	0	0	0	0	27.25	do...	6.00	
Lot 2	15	31.00	do...	do...	do...	31; willow and alder	0	0	0	0	0	31.00	do...	6.00	



Lot 4.	47.75	Poplar, spruce, cedar.	Rolling	Rocky	5; willow and alder	42.75	200.00	0	0	5.00	do.	5.00	Back water may prevent drainage.
SW. $\frac{1}{4}$ SW. $\frac{1}{4}$	16	40.00	do.	do.	5; cat spruce	35.00	50.00	0	0	do.	do.	5.00	Do.
NW. $\frac{1}{4}$ SW. $\frac{1}{4}$	17	40.00	do.	do.	20; cat spruce	20.00	100.00	0	0	do.	do.	5.00	Do.
SW. $\frac{1}{4}$ SW. $\frac{1}{4}$	17	40.00	Level	Muskeg	40; spruce and tamarack.	0	100.00	0	0	do.	do.	5.00	Do.
SE. $\frac{1}{4}$ SW. $\frac{1}{4}$	17	40.00	do.	do.	do.	0	150.00	0	0	do.	do.	5.00	Do.
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$	17	40.00	do.	do.	30; spruce and tamarack.	10.00	100.00	0	0	do.	do.	5.00	Do.
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$	17	40.00	do.	Sandy loam.	20; spruce and tamarack.	20.00	100.00	0	0	do.	do.	5.00	Do.
Lot 1.	18	30.00	do.	Black muck.	30; willow and alder.	0	0	0	0	30.00	do.	5.00	
Lot 2.	18	38.50	do.	do.	None.	0	0	0	0	38.50	do.	7.00	
SW. $\frac{1}{4}$ NE. $\frac{1}{4}$	18	40.00	do.	Muskeg	40; willow and cat spruce.	0	0	0	0	25.00	do.	5.00	
Lot 3.	18	43.46	do.	Black muck.	None.	0	0	0	0	43.46	do.	7.00	
Lot 4.	18	38.50	do.	do.	do.	0	0	0	0	38.50	do.	7.00	
NE. $\frac{1}{4}$ SW. $\frac{1}{4}$	18	40.00	do.	Muskeg	40; cat spruce.	0	0	0	0	10.00	do.	5.00	
Lot 5.	18	42.74	do.	do.	42.74; cat spruce and willow.	0	0	0	0	42.74	do.	5.00	
Lot 6.	18	42.78	do.	do.	42.78; cat spruce and willow.	0	0	0	0	10.00	do.	5.00	
SE. $\frac{1}{4}$ SW. $\frac{1}{4}$	18	40.00	do.	do.	40; cat spruce.	0	50.00	0	0	5.00	do.	5.00	Back water may prevent drainage.
NE. $\frac{1}{4}$ SE. $\frac{1}{4}$	18	40.00	do.	do.	do.	0	0	0	0	do.	do.	5.00	Do.
NW. $\frac{1}{4}$ SE. $\frac{1}{4}$	18	40.00	do.	do.	30; cat spruce.	10.00	0	0	0	5.00	do.	5.00	
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$	18	40.00	do.	do.	40; cat spruce.	0	0	0	0	do.	do.	5.00	Do.
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$	18	40.00	do.	do.	do.	0	0	0	0	do.	do.	5.00	Do.
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$	19	40.00	do.	do.	do.	0	0	0	0	do.	do.	5.00	Do.
NW. $\frac{1}{4}$ NE. $\frac{1}{4}$	19	40.00	do.	do.	do.	0	0	0	0	do.	do.	5.00	Do.
SW. $\frac{1}{4}$ NE. $\frac{1}{4}$	19	40.00	do.	Muskeg and sandy loam.	30; cat spruce.	10.00	75.00	0	0	do.	do.	5.00	Do.
SE. $\frac{1}{4}$ NE. $\frac{1}{4}$	19	40.00	do.	Muskeg	40; tamarack and spruce.	0	25.00	0	0	do.	do.	5.00	Do.
NE. $\frac{1}{4}$ NW. $\frac{1}{4}$	19	40.00	do.	do.	40; cat spruce.	0	0	0	0	do.	do.	5.00	Do.
Lot 1.	19	42.85	do.	do.	42.85; cat spruce.	0	0	0	0	do.	do.	5.00	Do.
Lot 2.	19	42.95	do.	do.	42.95; cat spruce.	0	0	0	0	do.	do.	5.00	Do.
SE. $\frac{1}{4}$ NW. $\frac{1}{4}$	19	40.00	do.	do.	40; cat spruce.	0	0	0	0	do.	do.	5.00	Do.
Lot 3.	19	43.05	do.	do.	43.05; cat spruce.	0	0	0	0	10.00	do.	5.00	Do.
Lot 4.	19	43.15	do.	do.	25; tamarack and spruce.	18.15	50.00	0	0	10.00	do.	5.00	Do.
NE. $\frac{1}{4}$ SE. $\frac{1}{4}$	19	40.00	do.	do.	30; tamarack and spruce.	10.00	400.00	0	0	do.	do.	5.00	Do.
NW. $\frac{1}{4}$ SE. $\frac{1}{4}$	19	40.00	do.	do.	do.	10.00	200.00	0	0	do.	do.	5.00	Do.
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$	19	40.00	do.	do.	40; tamarack and spruce.	0	400.00	0	0	do.	do.	5.00	Do.
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$	19	40.00	do.	do.	do.	0	300.00	0	0	do.	do.	5.00	Do.

## Return of the appraisers of Koochiching County, Minn.—Continued.

## TOWNSHIP 70 NORTH, RANGE 22 WEST—Continued.

Parts of section.	Section.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp, and kind.	Acres of up-land.	Acres of timber.	Value of timber.	Acres of prairie.	Acres of flood-meadow.	Acres of land flooded.	Im- prove- ments.	Value per acre.	Remarks.
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ .	20	40.00	Poplar, spruce, tamarack.	Level...	Muskeg.....	20; tamarack and spruce.	0	20.00	\$75.00	0	0	.....	None....	\$5.00	Back water may prevent drainage. Do.
NW. $\frac{1}{4}$ NE. $\frac{1}{4}$ .	20	40.00	Spruce and tamarack.	do.....	do.....	40; spruce and tamarack.	0	10.00	25.00	0	0	.....	do.....	5.00	Do.
SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ .	20	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	.....	do.....	5.00	Do.
SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ .	20	40.00	Poplar, spruce, tamarack.	do.....	do.....	30; spruce and tamarack.	10.00	0	0	0	0	.....	do.....	5.00	Do.
NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	20	40.00	Cat spruce.	do.....	do.....	40; cat spruce.	0	0	0	0	0	.....	do.....	5.00	Do.
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	20	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	.....	do.....	5.00	Do.
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	20	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	.....	do.....	5.00	Do.
SE. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	20	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	.....	do.....	5.00	Do.
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	28	40.00	Poplar, spruce, tamarack, and cedar.	do.....	do.....	35; tamarack and spruce.	5.00	40	250	0	0	.....	do.....	5.00	Do.
SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	28	40.00	do.....	do.....	do.....	40; tamarack and spruce.	0	20	50	0	0	.....	do.....	5.00	Do.
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ .	29	40.00	Tamarack and cedar.	do.....	do.....	40; tamarack and cedar.	0	20	100	0	0	.....	do.....	5.00	Do.
NW. $\frac{1}{4}$ NE. $\frac{1}{4}$ .	29	40.00	do.....	do.....	do.....	do.....	0	20	50	0	0	.....	do.....	5.00	Do.
SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ .	29	40.00	Spruce, tamarack, and cedar.	do.....	do.....	40; tamarack and spruce.	0	5	25	0	0	.....	do.....	5.00	Do.
NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	29	40.00	do.....	do.....	do.....	do.....	0	5	25	0	0	.....	do.....	5.00	Do.
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	29	40.00	do.....	do.....	do.....	do.....	0	10	75	0	0	.....	do.....	5.00	Do.
SE. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	29	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	.....	do.....	5.00	Do.
NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	29	40.00	Cat spruce.	do.....	do.....	40; cat spruce.	0	0	0	0	0	.....	do.....	5.00	Do.
NW. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	29	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	.....	do.....	5.00	Do.
SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	29	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	.....	do.....	5.00	Do.
SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	29	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	.....	do.....	5.00	Do.
NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	29	40.00	Poplar, spruce, tamarack.	do.....	do.....	25; tamarack and spruce.	15.00	0	0	0	0	.....	do.....	5.00	Do.
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	29	40.00	Cat spruce.	do.....	do.....	40; tamarack and spruce.	0	0	0	0	0	.....	do.....	5.00	Do.
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	29	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	.....	do.....	5.00	Do.
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ .	30	40.00	Spruce and tamarack.	do.....	do.....	do.....	0	20	75	0	0	.....	do.....	5.00	Do.
NW. $\frac{1}{4}$ NE. $\frac{1}{4}$ .	30	40.00	Poplar, spruce, tamarack.	do.....	do.....	35; tamarack and spruce.	5.00	10	25	0	0	.....	do.....	5.00	Do.

[illegible]



## Return of the appraisers of Koochiching County, Minn.—Continued.

## TOWNSHIP 70 NORTH, RANGE 22 WEST—Continued.

Parts of section.	Section.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp, and kind.	Acres of up-land.	Acres of timber.	Value of timber.	Acres of prairie.	Acres of meadow.	Acres of land flooded.	Im- prove- ments.	Value per acre.	Remarks.
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$	33	40.00	Cat. spruce and tamarack.	Level...	Muskeg.....	40; tamarack and spruce.	0	0	0	0	0	.....	None...	\$5.00	Back water may prevent drainage.
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$	33	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	.....	do.....	5.00	Do.
SE. $\frac{1}{4}$ NW. $\frac{1}{4}$	33	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	.....	do.....	5.00	Do.
NE. $\frac{1}{4}$ SW. $\frac{1}{4}$	33	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	.....	do.....	5.00	Do.
NW. $\frac{1}{4}$ SW. $\frac{1}{4}$	33	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	.....	do.....	5.00	Do.
W. SW. $\frac{1}{4}$ S. $\frac{1}{4}$	33	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	.....	do.....	5.00	Do.
SE. $\frac{1}{4}$ SW. $\frac{1}{4}$	33	40.00	Cat. spruce.....	do.....	do.....	do.....	0	0	0	0	0	.....	do.....	5.00	Do.
NE. $\frac{1}{4}$ SE. $\frac{1}{4}$	33	40.00	Pine spruce, and tamarack.	Rolling.....	do.....	30; spruce and tamarack.	10.00	10.00	\$150.00	0	0	.....	do.....	5.00	Do.
NW. $\frac{1}{4}$ SE. $\frac{1}{4}$	33	40.00	Cat. spruce and tamarack.	Level.....	Muskeg and rocks.	40; tamarack and spruce.	0	0	0	0	0	.....	do.....	5.00	Do.
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$	33	40.00	Poplar, spruce, and tamarack.	Rolling.....	Muskeg and rocky.	30; tamarack and spruce.	10.00	0	0	0	0	.....	do.....	5.00	Do.
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$	33	40.00	Spruce and cedar.	do.....	do.....	20; tamarack and spruce.	20.00	20.00	200.00	0	0	.....	do.....	5.00	Do.
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$	34	40.00	Pine, spruce, and tamarack.	do.....	do.....	do.....	20.00	20.00	200.00	0	0	.....	do.....	5.00	Do.
NW. $\frac{1}{4}$ NE. $\frac{1}{4}$	34	40.00	Spruce and tamarack.	do.....	do.....	30; tamarack and spruce.	10.00	20.00	200.00	0	0	.....	do.....	5.00	Do.
SW. $\frac{1}{4}$ NE. $\frac{1}{4}$	34	40.00	Spruce, tamarack, and cedar.	do.....	do.....	20; tamarack and spruce.	20.00	40.00	400.00	0	0	.....	do.....	5.00	Do.
SE. $\frac{1}{4}$ NE. $\frac{1}{4}$	34	40.00	do.....	do.....	do.....	30; tamarack and spruce.	10.00	20.00	\$150.00	0	0	.....	do.....	5.00	Do.
SE. $\frac{1}{4}$ NW. $\frac{1}{4}$	34	40.00	do.....	do.....	do.....	20; tamarack and spruce.	20.00	20.00	300.00	0	0	.....	do.....	5.00	Do.
NE. $\frac{1}{4}$ SW. $\frac{1}{4}$	34	40.00	do.....	do.....	do.....	30; tamarack and spruce.	10.00	20.00	200.00	0	0	.....	do.....	5.00	Do.
NW. $\frac{1}{4}$ SW. $\frac{1}{4}$	34	40.00	Pine, spruce, and tamarack.	do.....	do.....	do.....	10.00	20.00	15.00	0	0	.....	do.....	5.00	Do.
SW. $\frac{1}{4}$ SW. $\frac{1}{4}$	34	40.00	Spruce, tamarack, and cedar.	do.....	do.....	25; tamarack and spruce.	15.00	30.00	300.00	0	0	.....	do.....	5.00	Do.
SE. $\frac{1}{4}$ SW. $\frac{1}{4}$	34	40.00	do.....	do.....	do.....	20; tamarack and spruce.	20.00	20.00	100.00	0	0	.....	do.....	5.00	Do.

NE. 1 SE. 1.	34	40.00	do.	Level.	Muskeg.	40; tamarack and spruce.	0	0	0	0	0	do.	5.00	Do.
NW. 1 SE. 1.	34	40.00	do.	do.	do.	do.	0	20.00	100.00	0	0	do.	5.00	Do.
SW. 1 SE. 1.	34	40.00	do.	do.	do.	do.	5.00	20.00	150.00	0	0	do.	5.00	Do.
SE. 1 SE. 1.	34	40.00	Cat spruce.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NE. 1 NE. 1.	35	40.00	Spruce and tamarack.	do.	do.	40; tamarack and spruce.	20.00	10.00	25.00	0	0	do.	5.00	Do.
NW. 1 NE. 1.	35	40.00	do.	do.	d	40; tamarack and spruce.	0	10.00	25.00	0	0	do.	5.00	Do.
SW. 1 NE. 1.	35	40.00	do.	do.	do.	do.	0	0	0 <sup>p</sup>	0	0	do.	5.00	Do.
SE. 1 NE. 1.	35	40.00	do.	do.	do.	25; tamarack and spruce.	15.00	10.00	25.00	0	0	do.	5.00	Do.
NE. 1 NW. 1.	35	40.00	do.	do.	do.	35; tamarack and spruce.	5.00	0	0	0	0	do.	5.00	Do.
NW. 1 NW. 1.	35	40.00	do.	do.	do.	10; tamarack and spruce.	30.00	20.00	150.00	0	0	do.	5.00	Do.
SW. 1 NW. 1.	35	40.00	do.	do.	rocky.	30; tamarack and spruce.	10.00	20.00	150.00	0	0	do.	5.00	Do.
SE. 1 NW. 1.	35	40.00	do.	do.	Muskeg.	40; tamarack and spruce.	0	0	0	0	0	do.	5.00	Do.
NE. 1 SW. 1.	35	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NW. 1 SW. 1.	35	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SW. 1 SW. 1.	35	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SE. 1 SW. 1.	35	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NE. 1 SE. 1.	35	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
NW. 1 SE. 1.	35	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SW. 1 SE. 1.	35	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SE. 1 SE. 1.	35	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
Lot 1.	36	12.25	Spruce and poplar.	Rolling.	Muskeg and rocky.	6.25; spruce muskeg.	6.00	0	0	0	0	12.25	5.00	Do.
Lot 2.	36	17.25	Cat spruce.	Level.	rocky.	17.25; cat spruce.	0	0	0	0	0	17.25	5.00	Do.
Lot 3.	36	56.50	Poplar and spruce.	Rolling.	Muskeg and rocky.	40; cat spruce.	16.50	0	0	0	0	40.00	5.00	Do.
NE. 1 NW. 1.	36	40.00	Jack pine, poplar, spruce.	do.	do.	30; spruce muskeg.	10.00	10.00	50.00	0	0	do.	5.00	Do.
NW. 1 NW. 1.	36	40.00	do.	do.	do.	do.	10.00	10.00	25.00	0	0	do.	5.00	Do.
SW. 1 NW. 1.	36	40.00	do.	do.	Muskeg.	40; cat spruce.	0	0	0	0	0	do.	5.00	Do.
SE. 1 NW. 1.	36	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
Lot 4.	36	39.00	do.	do.	do.	39; cat spruce.	0	0	0	0	0	40.00	5.00	Do.
NW. 1 SW. 1.	36	40.00	do.	do.	do.	40; cat spruce.	0	0	0	0	0	39.00	5.00	Do.
SW. 1 SW. 1.	36	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
SE. 1 SW. 1.	36	40.00	do.	do.	do.	do.	0	0	0	0	0	do.	5.00	Do.
Lot 5.	36	15.00	do.	do.	do.	15; cat spruce.	0	0	0	0	0	15.00	5.00	Do.

Back water  
may prevent  
drainage.

## Return of the appraisers of Koochiching County, Minn.—Continued.

## TOWNSHIP 71 NORTH, RANGE 22 WEST—Continued..

Parts of section.	Section.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp, and kind.	Acres of up-land.	Acres of timber.	Value of timber.	Acres of prairie.	Acres of meadow.	Acres of land flooded.	Im- prove- ments.	Value per acre.	Remarks.
Lot 3.....	33	50.25	Pine, spruce, poplar.	Rolling.	Black muck and rock.	None.....	25.00	25.00	\$335.00	0	0	25.25	None....	\$7.00	

## TOWNSHIP 70 NORTH, RANGE NO. 22 WEST.

Parts of section.	Section.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp, and kind.	Acres of up-land.	Acres of timber.	Value of timber.	Acres of prairie.	Acres of meadow.	Acres of land flooded.	Im- prove- ments.	Value per acre.	Remarks.
NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	20	40.00	Cat spruce.....	Level...	Muskeg.....	40; cat spruce.....	0	0	0	0	0	0	None....	\$5.00	Back water may prevent drainage.
NW. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	20	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	0	do....	5.00	Do.
SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	20	40.00	do.....	do.....	do.....	do.....	0	20.00	\$75.00	0	0	0	do....	5.00	Do.
SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	20	40.00	do.....	do.....	do.....	do.....	0	20.00	25.00	0	0	0	do....	5.00	Do.
NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	20	40.00	do.....	do.....	do.....	do.....	0	40.00	150.00	0	0	0	do....	5.00	Do.
NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	20	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	0	do....	5.00	Do.
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	20	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	0	do....	5.00	Do.
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	20	40.00	Spruce, tamarack and cedar.	do.....	do.....	40; spruce and tamarack.	0	40.00	125.00	0	0	0	do....	5.00	Do.
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	21	40.00	Spruce, tamarack and poplar.	do.....	Muskeg and sandy loam.	20; tamarack and spruce.	20.00	20.00	100.00	0	0	0	do....	5.00	Do.
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	21	40.00	do.....	do.....	do.....	30; tamarack and spruce.	10.00	30.00	200.00	0	0	0	do....	5.00	Do.
NW. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	21	40.00	Poplar, spruce, tamarack and cedar.	do.....	do.....	35; spruce and cedar.	5.00	30.00	200.00	0	0	0	do....	5.00	Do.
SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	21	40.00	do.....	do.....	do.....	25; spruce and cedar.	15.00	40.00	350.00	0	0	0	do....	5.00	Do.
Lot 1.....	22	39.75	Pine, spruce, and tamarack.	do.....	Muskeg and rocky.	10; tamarack and spruce.	29.75	29.75	200.00	0	0	10.00	do....	5.00	
Lot 2.....	22	37.75	do.....	do.....	do.....	10; willows.....	27.75	27.75	200.00	0	0	10.00	do....	5.00	
Lot 2.....	23	38.50	do.....	do.....	do.....	15; willows.....	21.50	10.00	40.00	0	0	15.00	do....	5.00	



## APPENDIX.

Lot 4.....	2	43.55	Cat spruce.....	Level.....	Muskeg.....	43.55; cat spruce.....	0	0	0	0	0	0	None.....	\$5.00	Back water may prevent drainage. Do.
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$	2	40.00	do.....	do.....	do.....	40; cat spruce.....	0	0	0	0	0	0	do.....	5.00	
NW. $\frac{1}{4}$ SW. $\frac{1}{4}$	2	40.00	Poplar, spruce, and tamarack.	do.....	Muskeg and sandy loam	30; spruce and tam- arack.	10.00	20.00	\$25.00	0	0	0	do.....	5.00	
Lot 1.....	3	53.30	Cat spruce.....	do.....	Muskeg	40; cat spruce.....	13.30	0	0	0	0	0	do.....	5.00	
Lot 5.....	3	27.50	None.....	do.....	Black muck	None.....	0	0	0	0	0	27.50	do.....	7.00	
Lot 6.....	3	41.00	do.....	do.....	do.....	do.....	0	0	0	0	0	41.00	do.....	7.00	
Lot 2.....	3	13.60	do.....	do.....	do.....	do.....	0	0	0	0	0	13.60	do.....	7.00	
Lot 3.....	3	41.82	do.....	do.....	do.....	do.....	0	0	0	0	0	41.82	do.....	7.00	
Lot 4.....	3	24.75	do.....	do.....	do.....	do.....	0	0	0	0	0	24.75	do.....	7.00	
Lot 9.....	3	29.25	do.....	do.....	do.....	do.....	0	0	0	0	0	29.25	do.....	7.00	
Lot 10.....	3	16.25	do.....	do.....	do.....	do.....	0	0	0	0	0	16.25	do.....	7.00	
SW. $\frac{1}{4}$ SW. $\frac{1}{4}$	3	40.00	Cat spruce.....	do.....	do.....	35; cat spruce.....	0	0	0	0	0	5.00	do.....	5.00	
Lot 7.....	3	27.30	None.....	do.....	Black muskeg	None.....	0	0	0	0	0	27.30	do.....	7.00	
Lot 8.....	3	25.75	do.....	do.....	do.....	do.....	0	0	0	0	0	25.75	do.....	7.00	
Lot 1.....	4	42.92	do.....	do.....	do.....	do.....	0	0	0	0	0	42.92	do.....	7.00	
SW. $\frac{1}{4}$ NE. $\frac{1}{4}$	4	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	40.00	do.....	7.00	
Lot 5.....	4	37.75	do.....	do.....	do.....	do.....	0	0	0	0	0	37.75	do.....	7.00	
Lot 3.....	4	42.62	Cat spruce.....	do.....	Muskeg	35; cat spruce.....	7.62	0	0	0	0	37.75	do.....	5.00	Back water may prevent drainage.
Lot 4.....	4	42.48	Cat spruce.....	Level.....	do.....	42.48; cat spruce.....	0	0	0	0	0	20.00	do.....	5.00	
SE. $\frac{1}{4}$ NW. $\frac{1}{4}$	4	40.00	Poplar, spruce, and tamarack.	do.....	do.....	35; spruce and tamarack.	5.00	0	0	0	0	0	do.....	6.00	
Lot 6.....	4	13.75	None.....	do.....	Black muck.....	None.....	0	0	0	0	0	13.75	do.....	7.00	
Lot 7.....	4	27.50	do.....	do.....	do.....	do.....	0	0	0	0	0	27.50	do.....	7.00	
Lot 12.....	4	8.75	do.....	do.....	do.....	do.....	0	0	0	0	0	8.75	do.....	7.00	
Lot 14.....	4	38.50	Cat spruce.....	do.....	Muskeg	do.....	0	0	0	0	0	8.50	do.....	5.00	
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$	9	40.00	do.....	do.....	do.....	30; cat spruce.....	0	0	25.00	0	0	20.00	do.....	7.00	
NW. $\frac{1}{4}$ NE. $\frac{1}{4}$	9	40.00	do.....	do.....	do.....	do.....	10.00	10.00	25.00	0	0	10.00	do.....	6.00	
SW. $\frac{1}{4}$ NE. $\frac{1}{4}$	9	40.00	Poplar and spruce.	do.....	do.....	do.....	20.00	20.00	75.00	0	0	0	do.....	5.00	
Lot 3.....	9	10.20	None.....	do.....	Black muck.....	None.....	0	0	0	0	0	10.20	do.....	7.00	
Lot 4.....	9	5.75	do.....	do.....	do.....	do.....	0	0	0	0	0	5.75	do.....	7.00	
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$	10	40.00	Poplar, spruce, and tamarack.	do.....	Muskeg.....	35; tamarack and spruce.	0	0	0	0	0	5	do.....		

## Return of the appraisers of Koochiching County, Minn.—Continued.

TOWNSHIP 70 NORTH, RANGE 23 WEST.

Parts of section.	Section.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp, and kind.	Acres of up-land.	Acres of timber.	Value of timber.	Acres of prairie, meadow.	Acres of land flooded.	Im- prove- ments.	Value per acre.	Remarks.
NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	11	40.00	Spruce, tamarack, and cedar.	Level...	Muskeg.....	30; tamarack, spruce, and cedar.	10.00	20.00	Sold.	0	10.00	None...	\$5.00	Under timber permit.
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	11	40.00	None.....	do.....	Black musk...	40; willow and alder.	0	0	do...	0	40.00	do....	5.00	Do.
Lot 4.....	12	41.45	Spruce, tamarack, and balsam.	do.....	Muskeg and sandy loam.	20; spruce and tamarack.	21.25	20.00	\$50.00	0	30.00	do....	5.00	
NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	12	40.00	do.....	do.....	do.....	do.....	20.00	20.00	25.00	0	20.00	do....	5.00	
Lot 5.....	12	21.50	Willow and alder.	do.....	Black musk...	21.50; willow and alder.	0	0	0	0	21.50	do....	5.00	
Lot 6.....	12	22.50	do.....	do.....	do.....	22.50; willow and alder.	0	0	0	0	22.50	do....	5.00	
Lot 3.....	12	50.64	Aspen, spruce, and cedar.	do.....	Sandy loam...	20; spruce and cedar.	30.64	0	0	0	20.00	do....	5.00	
NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ .	12	40.00	do.....	do.....	do.....	do.....	20.00	20.00	50.00	0	10.00	do....	5.00	
Lot 7.....	12	37.25	None.....	do.....	Muskeg.....	37.25; open muskeg.	0	0	0	0	37.25	do....	5.00	
Lot 8.....	12	26.18	do.....	do.....	do.....	26.18; open muskeg.	0	0	0	0	26.18	do....	5.00	
Lot 3.....	13	38.10	do.....	do.....	Black musk...	None.....	0	0	0	0	38.10	do....	7.00	
Lot 4.....	13	16.67	do.....	do.....	do.....	do.....	0	0	0	0	16.67	do....	7.00	
Lot 1.....	13	23.65	do.....	do.....	do.....	do.....	0	0	0	0	23.65	do....	7.00	
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ .	13	40.00	Cat spruce, willow, and alder.	do.....	Muskeg.....	40; cat spruce.	0	0	0	0	40.00	do....	5.00	
Lot 2.....	13	50.75	do.....	do.....	do.....	50.75; cat spruce and willow.	0	0	0	0	50.75	do....	5.00	
Lot 7.....	13	35.70	do.....	do.....	do.....	35.70; cat spruce and willow.	0	0	0	0	35.70	do....	5.00	
NW. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	13	40.00	Cat spruce.	do.....	do.....	40; cat spruce.	0	0	0	0	40.00	do....	5.00	
SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	13	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	do....	5.00	Back water may prevent drainage.
SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .	13	40.00	do.....	do.....	do.....	do.....	0	0	0	0	0	do....	5.00	
Lot 5.....	13	14.40	None.....	do.....	Black musk...	None.....	0	0	0	0	14.40	do....	5.00	
Lot 6.....	13	14.10	do.....	do.....	do.....	do.....	0	0	0	0	14.10	do....	5.00	
Lot 8.....	13	22.00	do.....	do.....	do.....	do.....	0	0	0	0	22.00	do....	7.00	
Lot 9.....	13	53.00	do.....	do.....	do.....	do.....	0	0	0	0	53.00	do....	7.00	

NE. $\frac{1}{4}$ NE. $\frac{1}{4}$	14	40.00	Spruce, tamarack cedar.	do.	Muskeg.	30; tamarack and cedar.	10.00	25.00	0	0	30.00	do.	5.00	This timber is under permit. Do.
SE. $\frac{1}{4}$ NE. $\frac{1}{4}$	14	40.00	do.	do.	do.	40; tamarack and cedar.	0	50.00	0	0	25.00	do.	5.00	
Lot 1	23	40.05	Poplar, spruce, ash.	do.	do.	30; spruce.	10.05	Sold.	0	0	15.00	do.	5.00	
Lot 2	23	32.85	do.	do.	do.	do.	9.85	Sold.	0	0	15.00	do.	5.00	
Lot 1	24	47.10	None.	do.	do.	47.10; open muskeg	0	0	0	0	47.10	do.	5.00	
Lot 2	24	24.75	do.	do.	Black muck.	None.	0	0	0	24.75	do.	7.00		
Lot 5	24	37.82	do.	do.	Muskeg.	37.82; open muskeg	0	0	0	0	37.82	do.	5.00	
NE. $\frac{1}{4}$ NW. $\frac{1}{4}$	24	40.00	do.	do.	Black muck.	None.	0	0	40.00	40.00	do.	7.00		
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$	24	40.00	Cat spruce.	do.	Muskeg.	40; cat spruce.	0	0	0	0	30.00	do.	5.00	
Lot 3	24	16.50	None.	do.	Black muck.	None.	0	0	16.50	16.50	do.	7.00		
Lot 4	24	35.05	do.	do.	do.	do.	0	0	35.05	35.05	do.	7.00		
Lot 5	24	45.53	do.	do.	do.	do.	0	0	45.53	45.53	do.	7.00		
Lot 6	24	45.10	do.	do.	do.	do.	0	0	45.10	45.10	do.	7.00		
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$	24	40.00	Poplar and birch.	do.	Sandy loam.	do.	30.00	0	0	10.00	40.00	do.	7.00	
Lot 10	24	45.47	do.	do.	do.	do.	25.47	0	0	20.00	45.47	do.	7.00	
SW. $\frac{1}{4}$ SW. $\frac{1}{4}$	25	40.00	Poplar and spruce.	do.	Muskeg.	10; spruce.	10.00	0	0	0	5.00	do.	5.00	
SW. $\frac{1}{4}$ SE. $\frac{1}{4}$	26	40.00	Poplar, spruce, and balsam.	do.	Sandy.	None.	40.00	75.00	0	0	0	do.	7.00	Back water may prevent drainage.
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$	26	40.00	do.	do.	do.	do.	40.00	25.00	0	0	0	do.	7.00	This timber is under permit. Do.
NE. $\frac{1}{4}$ NE. $\frac{1}{4}$	33	40.00	Spruce and tamarack.	do.	Muskeg.	40; spruce and tamarack.	40.00	Sold.	0	0	0	do.	5.00	
NW. $\frac{1}{4}$ NE. $\frac{1}{4}$	33	40.00	Poplar, spruce, and tamarack.	do.	Muskeg and sandy loam.	25; spruce and tamarack.	15.00	Sold.	0	0	0	do.	5.00	
SE. $\frac{1}{4}$ NE. $\frac{1}{4}$	33	40.00	do.	do.	do.	10; spruce and tamarack.	30.00	Sold.	0	0	30.00	do.	5.00	
NE. $\frac{1}{4}$ SE. $\frac{1}{4}$	33	40.00	Poplar and willow.	do.	Black muck.	None.	20.00	0	0	20.00	40.00	do.	7.00	
SE. $\frac{1}{4}$ SE. $\frac{1}{4}$	33	40.00	do.	do.	do.	do.	20.00	0	0	20.00	40.00	do.	7.00	
Lot 2	34	30.50	Tamarack and willow.	do.	do.	30.50; tamarack and willow.	0	50.00	0	0	20.00	do.	5.00	
Lot 3	34	17.80	Poplar and willow.	do.	do.	9; willow.	8.80	0	0	0	17.80	do.	5.00	
NW. $\frac{1}{4}$ NW. $\frac{1}{4}$	34	40.00	Spruce and tamarack.	do.	do.	40; tamarack and spruce.	0	200.00	0	0	5.00	do.	5.00	
SW. $\frac{1}{4}$ NW. $\frac{1}{4}$	34	40.00	Tamarack.	do.	do.	40; tamarack.	0	100.00	0	0	30.00	do.	5.00	
SE. $\frac{1}{4}$ NW. $\frac{1}{4}$	34	40.00	Tamarack and willow.	do.	do.	20; tamarack and willow.	20.00	100.00	0	0	20.00	do.	5.00	
Lot 6	34	37.40	Willow and alder.	do.	do.	37.40; willow and alder.	0	0	0	0	37.40	do.	5.00	
Lot 7	34	28.40	do.	do.	do.	28.40; willow and alder.	0	0	0	0	28.40	do.	5.00	
Lot 8	34	46.25	do.	do.	do.	46.25; willow and alder.	0	0	0	0	46.25	do.	5.00	
Lot 5	34	31.20	do.	do.	do.	31.20; willow and alder.	0	0	0	0	31.20	do.	5.00	
Lot 9	34	28.80	Cat spruce.	do.	Muskeg.	28.80; cat spruce.	0	0	0	0	28.80	do.	5.00	



## Return of the appraisers of Koochiching County, Minn.—Continued.

## TOWNSHIP 70 NORTH, RANGE 22 WEST—Continued.

Parts of section.	Section.	Acres.	Kind of timber.	Surface.	Soil.	Acres of swamp, and kind.	Acres of up-land.	Acres of timber.	Valc of tim-ber.	Acres of prairie.	Acres of meadow.	Acres of land flooded.	Im-prove-ments.	Value per acre.	Remarks.
NW $\frac{1}{4}$ NE. $\frac{1}{4}$	35	40.00	Poplar, willow, and alder.	Level...	Black muck...	10; willow and alder.	30.00	0	0	0	0	10.00	None...	\$5.00	
SW $\frac{1}{4}$ NE. $\frac{1}{4}$	35	40.00	do.	do.	do.	do.	30.00	0	0	0	0	15.00	do.	5.00	
SE $\frac{1}{4}$ NE. $\frac{1}{4}$	35	40.00	Poplar and spruce.	do.	do.	25; tamarack and spruce.	15.00	10.00	\$50.00	0	0	15.00	do.	5.00	
Lot 1.	35	38.75	Poplar, spruce, and tamarack.	do.	do.	20; tamarack and spruce.	18.75	20.00	25.00	0	0	20.00	do.	5.00	
Lot 3.	35	19.00	do.	do.	do.	9; tamarack and spruce.	8.00	0	0	0	0	19.00	do.	5.00	
Lot 2.	35	38.00	Poplar and birch.	do.	do.	None.	38.00	0	0	0	0	38.00	do.	5.00	
Lot 4.	35	38.80	Poplar and spruce.	do.	do.	10; spruce.	28.80	0	0	0	0	20.00	do.	5.00	
NE $\frac{1}{4}$ SW $\frac{1}{4}$	35	40.00	do.	do.	do.	35; cat spruce.	5.00	0	0	0	0	5.00	do.	5.00	
NW $\frac{1}{4}$ SW $\frac{1}{4}$	35	40.00	do.	do.	do.	10; cat spruce.	30.00	0	0	0	0	25.00	do.	5.00	
SW $\frac{1}{4}$ SW $\frac{1}{4}$	35	40.00	do.	do.	do.	35; cat spruce.	5.00	0	0	0	0	10.00	do.	5.00	
NE $\frac{1}{4}$ SE $\frac{1}{4}$	35	40.00	Spruce and cedar.	do.	Muskeg.	40; spruce and cedar.	0	40.00	100.00	0	0	0	do.	5.00	Back water may prevent drainage.
NW $\frac{1}{4}$ SE $\frac{1}{4}$	35	40.00	Poplar, spruce, and tamarack.	do.	Muskeg and sandy loam.	30; tamarack and spruce.	0	0	0	0	0	10.00	do.	5.00	
NW $\frac{1}{4}$ NW $\frac{1}{4}$	36	40.00	Poplar and spruce.	do.	do.	25; spruce.	15.00	20.00	25.00	0	0	0	do.	5.00	Do.
SW $\frac{1}{4}$ NW $\frac{1}{4}$	36	40.00	Cat spruce.	do.	Muskeg.	40; cat spruce.	0	0	0	0	0	0	do.	5.00	

## TOWNSHIP 71 NORTH, RANGE 23 WEST.

NW $\frac{1}{4}$ SE $\frac{1}{4}$	36	40.00	Poplar, spruce, and tamarack.	Level...	Muskeg.	35; cat spruce.	5.00	10.00	\$40.00	0	0	0	None...	\$6.00	Back water may prevent drainage.
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**MEMORANDUM OF SALES OF STATE LANDS, TOWNSHIPS 69, 70,  
AND 71, NORTH, RANGES 23 AND 24 WEST, KOOCHICHING  
COUNTY.**

**MINNESOTA EXHIBIT C.**

STATE OF MINNESOTA,  
OFFICE OF THE AUDITOR OF STATE,  
*St. Paul, January 28, 1916.*

I hereby certify that the attached copies of memorandum of sales of State lands in townships 69, 70, and 71 north, ranges 23 and 24 west, numbered 1 to 6 inclusive, are true copies of the record of such sales as filed in the office of the State auditor.

[SEAL.]

J. A. O. PREUS,  
*Auditor State of Minnesota.*

## Memorandum of sale of State lands in Koochiching County.

Name of purchaser.	Post-office address.	Part of section.	Section.	Township.	Range.	Area.	Appraised value per acre.	Appraised value of timber.	Sale per acre.	Date of sale.	Class of land.
Martin Mathison.....	Ericksburg.....	Lot 1 (NW $\frac{1}{4}$ NW $\frac{1}{4}$ )..	7	69	23	40.46	\$6.00	\$160.00	\$6.00	May 13, 1912	School
Fred D. Stearns.....	International Falls.....	Lot 2 (SW $\frac{1}{4}$ NW $\frac{1}{4}$ )..	7	69	23	40.39	5.00	.....	5.00	June 10, 1912	Swamp.
August Franson.....	Ericksburg.....	NE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ )..	7	69	23	40.00	6.00	.....	6.25	Apr. 8, 1912	School.
Peter Mathison.....	Ericksburg.....	Lot 3 (NW $\frac{1}{4}$ SW $\frac{1}{4}$ )..	7	69	23	40.31	5.00	.....	5.00	do.....	Swamp.
Gust Holm.....	Ericksburg.....	SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ )..	7	69	23	40.00	6.00	.....	6.00	do.....	School.
August Franson.....	do.....	NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	7	69	23	40.00	6.00	30.00	6.25	do.....	Do.
Gust Holm.....	do.....	SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	7	69	23	40.00	5.00	75.00	3.00	do.....	Do.
Do.....	do.....	SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	8	69	23	40.00	5.00	125.00	8.50	do.....	Do.
Do.....	do.....	SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	8	69	23	40.00	5.00	65.00	5.00	May 13, 1912	Do.
Nels Knutson.....	do.....	SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	8	69	23	37.58	5.00	.....	.....	do.....	Do.
Charles R. Davis.....	Milwaukee, Wis.....	NE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ )..	4	69	23	40.00	7.00	.....	7.00	Apr. 14, 1913	Do.
Florence Ringrose.....	Wauwatosa, Wis.....	NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ )..	4	69	23	40.00	7.00	.....	7.00	do.....	Do.
John Fitzgerald.....	Litchfield.....	SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	5	69	23	40.00	7.00	125.00	7.00	Oct. 13, 1913	Swamp.
Martin Mathison.....	Ericksburg.....	Lot 4 (NW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	8	69	23	75	5.00	.....	5.00	Apr. 14, 1913	School.
Do.....	do.....	Lot 3 (NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	8	69	23	2.10	5.00	.....	5.00	do.....	Do.
Do.....	do.....	Lot 3 (NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	8	69	23	2.65	5.00	.....	5.00	do.....	Do.
Do.....	do.....	Lot 3 (NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ )..	9	69	23	10.20	7.00	.....	7.00	do.....	Do.
Do.....	do.....	Lot 4 (NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ )..	9	69	23	5.75	7.00	.....	7.00	do.....	Do.
Wm. T. Pearson.....	St. Paul.....	NE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	9	69	23	40.00	7.00	20.00	7.00	Nov. 10, 1913	Do.
Do.....	do.....	SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	9	69	23	40.00	7.00	75.00	7.00	do.....	Do.
Do.....	do.....	SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	9	69	23	40.00	7.00	120.00	7.00	do.....	Do.
Do.....	do.....	NE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	11	69	23	40.00	7.00	75.00	7.00	Apr. 14, 1913	Do.
August F. Hoffman.....	Washburn, Wis.....	NE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	11	69	23	40.00	7.00	75.00	7.00	do.....	Do.
Do.....	do.....	SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	11	69	23	40.00	7.00	75.00	7.00	do.....	Do.
Do.....	do.....	SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	11	69	23	40.00	7.00	75.00	7.00	do.....	Do.
Do.....	do.....	Lot 2 (NW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	4	69	23	42.78	7.00	.....	7.00	Apr. 13, 1914	Swamp.
George Watson.....	Ericksburg.....	SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ )..	4	69	23	40.00	7.00	.....	7.00	do.....	Do.
John Fitzgerald.....	do.....	SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	9	69	23	40.00	7.00	100.00	7.00	do.....	School.
Alta M. Miner.....	International Falls.....	NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	9	69	23	40.00	7.00	100.00	7.00	Mar. 9, 1914	Do.
William T. Pearson.....	St. Paul.....	SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ )..	10	69	23	40.00	7.00	20.00	7.00	do.....	Do.
Fred Stearns.....	Ericksburg.....	SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ )..	10	69	23	40.00	7.00	20.00	7.00	Apr. 13, 1914	Swamp.
Alta M. Miner.....	International Falls.....	SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	11	69	23	40.00	7.00	60.00	7.00	Mar. 9, 1914	School.
Fred D. Young.....	Rochester, Minn.....	SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	11	69	23	40.00	7.00	60.00	7.00	do.....	Do.
Do.....	do.....	SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ )..	11	69	23	40.00	7.00	75.00	7.00	do.....	Do.
Do.....	do.....	SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ )..	11	69	23	40.00	7.00	75.00	7.00	do.....	Do.
Do.....	do.....	Lot 3 (NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ )..	4	69	23	42.62	7.00	.....	7.00	Mar. 8, 1915	Swamp.
George Watson.....	Ericksburg.....	SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ )..	4	69	23	40.00	7.00	.....	7.00	Apr. 12, 1915	School.
August Franson.....	do.....	SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ )..	4	69	23	40.00	7.00	.....	7.00	Oct. 11, 1915	Do.
D. W. Clark.....	Big Falls.....	Lot 6 (NE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	4	69	23	13.75	5.00	.....	5.00	do.....	Do.
Do.....	do.....	Lot 7 (NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	4	69	23	27.50	6.00	.....	6.00	do.....	Do.
Do.....	do.....	Lot 12 (SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ )..	4	69	23	8.75	7.00	.....	7.00	do.....	Do.



John Fitzgerald.	Fricksburg.	Lot 2 (NW $\frac{1}{4}$ NE $\frac{1}{4}$ )	5	69	23	42.21	7.00	June 14, 1915	Swamp School.
Do.	do	SW $\frac{1}{4}$ SE $\frac{1}{4}$	5	69	23	40.00	7.00	do	Swamp School.
Louis Simbro	do	Lot 4 (SW $\frac{1}{4}$ SW $\frac{1}{4}$ )	7	69	23	40.21	5.00	May 10, 1915	Swamp School.
Blanch M. Millard.	International Falls	SW $\frac{1}{4}$ SE $\frac{1}{4}$	9	69	23	40.00	7.00	Mar. 8, 1915	Do.
Do.	do	SE $\frac{1}{4}$ NE $\frac{1}{4}$	10	69	23	40.00	7.00	do	Do.
Do.	do	NE $\frac{1}{4}$ SE $\frac{1}{4}$	10	69	23	40.00	7.00	10.25	Do.
Do.	do	SE $\frac{1}{4}$ SE $\frac{1}{4}$	10	69	23	40.00	7.00	do	Do.
Do.	do	SW $\frac{1}{4}$ SE $\frac{1}{4}$	10	69	23	40.00	7.00	7.50	Do.
Do.	do	SW $\frac{1}{4}$ SE $\frac{1}{4}$	10	69	23	40.00	7.00	do	Do.
Old L. Olson.	Dassel, Minn.	SW $\frac{1}{4}$ SE $\frac{1}{4}$	10	69	23	40.00	7.00	11.25	Do.
Gust Holm	International Falls	SE $\frac{1}{4}$ SE $\frac{1}{4}$	7	69	23	40.00	7.00	Oct. 11, 1915	Swamp School.
Do.	do	SE $\frac{1}{4}$ SE $\frac{1}{4}$	7	69	23	40.00	5.00	Nov. 13, 1911	Do.
Malvel V. C. Kahler	Rochester, Minn.	NE $\frac{1}{4}$ SW $\frac{1}{4}$	11	69	23	40.00	7.00	Mar. 9, 1914	Do.
Do.	do	NW $\frac{1}{4}$ SW $\frac{1}{4}$	11	69	23	40.00	7.00	do	Do.
Do.	do	SE $\frac{1}{4}$ SW $\frac{1}{4}$	11	69	23	40.00	7.00	do	Do.
Do.	do	NE $\frac{1}{4}$ NW $\frac{1}{4}$	7	69	23	40.00	7.00	do	Do.
Theodore A. Ence.	do	SE $\frac{1}{4}$ NW $\frac{1}{4}$	7	69	23	40.00	5.00	Aug. 11, 1911	Do.
Magnus Ericson	do	NE $\frac{1}{4}$ SE $\frac{1}{4}$ (Railroad right of way).	8	69	23	40.00	5.00	do	Do.
Do.	do	NE $\frac{1}{4}$ SE $\frac{1}{4}$	8	69	23	40.00	5.00	Sept. 11, 1911	Do.
David La Roe	International Falls.	Lot 5 (SW $\frac{1}{4}$ NE $\frac{1}{4}$ )	23	70	23	17.00	5.00	Nov. 13, 1911	Do.
Wm. M. Sage.	Minneapolis.	NE $\frac{1}{4}$ SW $\frac{1}{4}$	34	70	23	40.00	5.00	Apr. 14, 1913	Swamp.
George Watson.	Fricksburg.	SW $\frac{1}{4}$ SE $\frac{1}{4}$	33	70	23	40.00	7.00	Apr. 13, 1914	Do.
Frank Watson and Frank Shelly.	Little Falls.	Lot 4 (NE $\frac{1}{4}$ SE $\frac{1}{4}$ )	34	70	23	9.70	5.00	Oct. 12, 1914	Do.
Do.	do	SW $\frac{1}{4}$ NE $\frac{1}{4}$	33	70	23	40.00	7.00	Apr. 12, 1915	Do.
Do.	do	NW $\frac{1}{4}$ NE $\frac{1}{4}$	33	70	23	40.00	7.00	Mar. 8, 1915	Do.
Do.	do	SW $\frac{1}{4}$ SE $\frac{1}{4}$	33	70	23	40.00	7.00	May 10, 1915	Do.
Do.	do	SE $\frac{1}{4}$ NE $\frac{1}{4}$	33	71	23	40.00	5.00	Apr. 8, 1912	Do.
Do.	do	NW $\frac{1}{4}$ NW $\frac{1}{4}$	33	71	23	40.00	5.00	do	Do.
Do.	do	SW $\frac{1}{4}$ NW $\frac{1}{4}$	33	71	23	40.00	5.00	do	Do.
Do.	do	SE $\frac{1}{4}$ NW $\frac{1}{4}$	33	71	23	40.00	5.00	do	Do.
Henry J. Strusz.	Red Wing.	NE $\frac{1}{4}$ SW $\frac{1}{4}$	33	71	23	40.00	5.00	Nov. 11, 1912	Do.
Reece M. Newport.	St. Paul.	NW $\frac{1}{4}$ SW $\frac{1}{4}$	33	71	23	40.00	5.00	Apr. 8, 1912	Do.
Do.	do	SW $\frac{1}{4}$ SW $\frac{1}{4}$	33	71	23	40.00	5.00	do	Do.
Henry J. Strusz.	Red Wing.	SE $\frac{1}{4}$ SW $\frac{1}{4}$	33	71	23	40.00	5.00	Nov. 11, 1912	Do.
Axel Lindstrom.	Ranier.	NE $\frac{1}{4}$ SE $\frac{1}{4}$	33	71	23	40.00	5.00	Apr. 8, 1912	Do.
Do.	do	NW $\frac{1}{4}$ SE $\frac{1}{4}$	33	71	23	40.00	5.00	do	Do.
Henry J. Strusz.	Red Wing.	SW $\frac{1}{4}$ SE $\frac{1}{4}$	33	71	23	40.00	5.00	Nov. 11, 1912	Do.
Do.	do	NE $\frac{1}{4}$ SW $\frac{1}{4}$	33	71	23	40.00	5.00	Apr. 8, 1912	Do.
Isabelle Hilt.	St. Paul.	NW $\frac{1}{4}$ SW $\frac{1}{4}$	34	71	23	40.00	5.00	Nov. 11, 1912	Do.
John Ferguson.	Ranier.	SE $\frac{1}{4}$ SW $\frac{1}{4}$	34	71	23	40.00	5.00	Apr. 13, 1912	Do.
Adolph Hilke.	do.	SE $\frac{1}{4}$ NE $\frac{1}{4}$	35	71	23	40.00	75.00	May 13, 1912	School.
Ludwig Olson.	do.	NE $\frac{1}{4}$ SW $\frac{1}{4}$	35	71	23	40.00	6.50	June 10, 1912	Swamp.
Clifford Demars	do.	NE $\frac{1}{4}$ SE $\frac{1}{4}$	35	71	23	40.00	6.50	Apr. 8, 1912	Do.
Do.	do.	NW $\frac{1}{4}$ SE $\frac{1}{4}$	35	71	23	40.00	6.50	May 13, 1912	Do.
Julian Anseth	Big Falls.	NE $\frac{1}{4}$ SW $\frac{1}{4}$	36	71	23	40.00	6.50	June 10, 1912	School.
Do.	do.	NW $\frac{1}{4}$ SW $\frac{1}{4}$	36	71	23	40.00	5.00	do	Do.
Do.	do.	SW $\frac{1}{4}$ SW $\frac{1}{4}$	36	71	23	40.00	5.00	do	Do.
Do.	do.	SE $\frac{1}{4}$ SW $\frac{1}{4}$	36	71	23	40.00	5.00	do	Do.
John McGivney	Ranier (box 20)	SE $\frac{1}{4}$ SE $\frac{1}{4}$	34	71	23	40.00	5.00	May 10, 1915	Swamp.

## Memorandum of sale of State lands in Koochiching County—Continued.

Name of purchaser.	Post-office address.	Part of section.	Section.	Town- ship.	Range.	Area.	Ap- praised value per acre.	Ap- praised value of timber.	Sale per acre.	Date of sale.	Class of land.
Charles Hendrickson.....	Fort Francis, Canada.	SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ .....	36	71	23	<i>A cres.</i>	\$5.00	\$25.00	\$5.00	June 14, 1915	School.
G. A. Fauchott.....	do.	SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .....	36	71	23	40.00	5.00	75.00	5.00	Oct. 11, 1915	Do.
Alfred Satterlund and Henry Wass.	do.	Lot 7 (SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ )..	25	71	23	58.25	6.00	.....	8.50	July 10, 1908	Do.
Philip S. Pendergast.....	International Falls.	Lot 8 (SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ )..	25	71	23	25.50	6.00	.....	6.00	do.	Do.
Horace I. Bedell.....	do.	SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .....	28	71	23	40.00	6.50	do.	6.50	do.	Do.
Joseph Keyes and Frank Keyes.	do.	SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .....	29	71	23	40.00	6.50	.....	6.50	do.	Do.
James W. Johnson.....	do.	SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ .....	30	71	23	40.00	6.00	.....	26.00	do.	Do.
Do.....	do.	SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .....	30	71	23	40.00	6.00	.....	21.00	do.	Do.
Frank H. Keyes (duplica- cate).	International Falls.	SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ .....	32	71	23	40.00	5.00	.....	5.00	Nov. 13, 1911	Do.
Duncan T. McFee.....	do.	SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ .....	27	71	23	40.00	6.50	.....	6.50	July 10, 1908	Swamp.
Joseph and Frank Keyes.	do.	SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ .....	27	71	23	40.00	6.50	.....	6.50	do.	Do.
Do.....	do.	SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ .....	28	71	23	40.00	6.50	.....	6.50	do.	Do.
Samuel C. Brown.....	do.	SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .....	35	71	23	40.00	6.50	.....	6.50	July 2, 1909	Do.
Do.....	do.	SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .....	35	71	23	40.00	6.50	.....	6.50	do.	Do.
Alfred Satterlund.....	do.	NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ .....	36	71	23	40.00	5.00	.....	5.00	May 10, 1910	School.
Horace Bedell and R. H. Bennett.	International Falls.	Lot 1 (NW. $\frac{1}{4}$ NE. $\frac{1}{4}$ )..	36	71	23	32.50	5.00	.....	5.00	July 10, 1908	Do.
Philip S. Pendergast.....	do.	Lot 3 (NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ )..	36	71	23	25.00	5.00	.....	5.00	do.	Do.
Samuel C. Brown.....	do.	NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ .....	36	71	23	40.00	5.00	.....	5.00	July 2, 1909	Do.
B. M. Weberg.....	Ranier, Minn.	Lot 2 (SE. $\frac{1}{4}$ NW. $\frac{1}{4}$ )..	36	71	23	42.25	6.50	.....	6.50	Aug. 14, 1911	Do.
Samuel C. Brown.....	do.	NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .....	36	71	23	40.00	6.00	.....	6.00	July 2, 1909	Do.
Horace I. Bedell.....	International Falls.	SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ .....	31	71	23	40.00	5.00	25.00	5.50	Nov. 13, 1911	Swamp.
Elua Bedell.....	do.	NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ .....	32	71	23	40.00	5.00	.....	5.00	do.	Do.
Horace I. Bedell.....	do.	NW. $\frac{1}{4}$ NE. $\frac{1}{4}$ .....	32	71	23	40.00	5.00	.....	5.00	do.	Do.
Frank H. Keyes.....	do.	SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ .....	32	71	23	40.00	5.00	.....	5.00	do.	Do.
Do.....	do.	SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ .....	32	71	23	40.00	5.00	.....	5.00	do.	School.
Mariam M. Keyes.....	do.	SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ .....	32	71	23	40.00	5.00	25.00	5.00	do.	Swamp.
Do.....	do.	SE. $\frac{1}{4}$ NW. $\frac{1}{4}$ .....	32	71	23	40.00	5.00	.....	5.00	do.	Do.
Bertr M. Weberg.....	Ranier, Minn.	SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ .....	36	71	23	40.00	6.50	.....	6.50	do.	School.
Gust Johnson.....	do.	SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ .....	34	71	23	40.00	5.00	40.00	5.00	Apr. 14, 1913	Do.
Virginia Mott.....	St. Paul.	SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ .....	35	71	23	40.00	6.50	.....	6.50	do.	Swamp.
Edwin Mott, Jr.....	do.	SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .....	35	71	23	40.00	6.50	.....	6.50	do.	Do.
Henry W. Farrer.....	International Falls.	SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ .....	36	71	23	40.00	6.00	.....	6.00	do.	School.
W. C. Gilbert.....	Grand Rapids, Minn.	NE. $\frac{1}{4}$ NE. $\frac{1}{4}$ .....	36	71	24	40.00	5.00	.....	5.00	Oct. 17, 1902	Do.
Do.....	do.	NW. $\frac{1}{4}$ NE. $\frac{1}{4}$ .....	36	71	24	40.00	5.50	.....	5.50	do.	Do.
Albert C. Jerome.....	do.	SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ .....	36	71	24	40.00	10.00	.....	25.00	Apr. 17, 1906	Do.

William C. Gilbert.....	Grand Rapids, Minn.....	SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ .....	36	71	24	40.00	10.00	.....	24.50	.....do.....	Do.
Do.....	do.....	NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ (NW. $\frac{1}{4}$ ).....	36	71	24	40.00	6.00	.....	6.00	Oct. 17, 1902	Do.
Do.....	do.....	Lot 1 (NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ ).....	36	71	24	33.00	7.00	.....	7.00	do.....	Do.
Do.....	do.....	SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ .....	36	71	24	40.00	6.00	.....	6.00	do.....	Do.
Do.....	do.....	SE. $\frac{1}{4}$ NW. $\frac{1}{4}$ .....	36	71	24	40.00	5.50	.....	5.30	do.....	Do.
Do.....	do.....	NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .....	36	71	24	40.00	5.00	.....	5.00	do.....	Do.
Do.....	do.....	SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ .....	36	71	24	40.00	5.00	.....	5.00	do.....	Do.
Albert C. Jerome.....	Do.....	SE. $\frac{1}{4}$ SW. $\frac{1}{4}$ .....	36	71	24	40.00	10.00	.....	25.00	Apr. 17, 1906	Do.
Do.....	Do.....	NE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .....	36	71	24	40.00	10.00	.....	12.50	do.....	Do.
William C. Gilbert.....	Grand Rapids, Minn.....	NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ .....	36	71	24	40.00	10.00	.....	25.00	do.....	Do.
Albert C. Jerome.....	Do.....	SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ .....	36	71	24	40.00	10.00	.....	20.00	do.....	Do.
Do.....	Do.....	SE. $\frac{1}{4}$ SE. $\frac{1}{4}$ .....	36	71	24	40.00	10.00	.....	12.50	do.....	Do.
			36	71	24	40.00	10.00	.....	12.50	do.....	Do.



MINNESOTA EXHIBIT F.  
Lands belonging to State of Minnesota, Rainy Lake and Rat Root River districts.

Plat No.	Section.	Township.	Range.	Level 498.				Level 499.				Level 500.			
				Acres flooded.	Value per acre.	Total value.	Value of timber.	Acres flooded.	Value per acre.	Total value.	Value of timber.	Acres flooded.	Value per acre.	Total value.	Value of timber.
1.	8	70	20	10	\$6.00	\$60.00	---	11	\$6.00	\$66.00	---	12	\$6.00	\$72.00	---
2.	9	70	20	12	6.00	72.00	---	12	6.00	72.00	---	13	78.00	78.00	---
3.	16	70	20	18	6.00	108.00	---	19	6.00	114.00	---	20	6.00	120.00	---
4.	32	71	21	86	5.00	430.00	---	86	5.00	430.00	---	88	5.00	440.00	---
5.	35	71	21	10	5.00	50.00	---	11	5.00	55.00	---	13	5.00	65.00	---
6.	36	71	21	86	5.00	430.00	---	87	5.00	435.00	---	89	5.00	445.00	---
7.	4	70	22	58	7.00	406.00	---	58	7.00	406.00	---	58	7.00	406.00	---
8.	---	70	22	40	6.00	240.00	---	40	6.00	240.00	---	40	6.00	240.00	---
9.	5	70	22	132	5.00	660.00	---	135	5.00	675.00	---	138	5.00	690.00	---
10.	7	70	22	314	5.00	1,570.00	\$50.00	320	5.00	1,600.00	---	325	5.00	1,625.00	---
11.	10	70	22	165	6.00	990.00	---	165	6.00	990.00	---	165	6.00	990.00	---
12.	11	70	22	44	6.00	264.00	---	44	6.00	264.00	---	45	6.00	270.00	---
13.	12	70	22	255	5.00	1,275.00	50.00	260	5.00	1,300.00	50.00	264	5.00	1,320.00	50.00
14.	13	70	22	446	5.00	2,230.00	25.00	449	5.00	2,245.00	25.00	454	5.00	2,270.00	25.00
15.	14	70	22	80	5.00	400.00	---	80	5.00	400.00	---	80	5.00	400.00	---
16.	15	70	22	280	7.00	1,960.00	---	281	7.00	1,967.00	---	282	7.00	1,974.00	---
17.	16	70	22	32	5.00	160.00	---	32	5.00	160.00	---	32	5.00	160.00	---
18.	17	70	22	58	6.00	348.00	---	58	6.00	348.00	---	58	6.00	348.00	---
19.	18	70	22	3	5.00	15.00	---	4	5.00	20.00	---	6	5.00	30.00	---
20.	19	70	22	232	6.00	1,392.00	50.00	240	6.00	1,440.00	50.00	252	6.00	1,512.00	50.00
21.	20	70	22	32	5.00	160.00	---	83	5.00	415.00	---	222	5.00	1,110.00	700.00
22.	21	70	22	23	5.00	115.00	---	24	5.00	120.00	---	25	5.00	125.00	---
23.	22	70	22	15	6.00	90.00	---	16	6.00	96.00	---	17	6.00	102.00	---
24.	23	70	22	8	6.00	48.00	---	22	6.00	132.00	---	40	6.00	240.00	---
25.	24	70	22	37	5.00	185.00	---	38	5.00	190.00	---	40	5.00	200.00	---
26.	25	69	23	20	5.00	100.00	---	30	5.00	150.00	---	48	5.00	240.00	---
27.	26	69	23	268	7.00	1,876.00	---	320	7.00	2,240.00	---	340	7.00	2,380.00	---
28.	27	69	23	300	7.00	2,100.00	---	320	7.00	2,240.00	---	360	7.00	2,520.00	---
29.	28	69	23	3	7.00	21.00	---	13	7.00	91.00	---	15	7.00	105.00	---
30.	29	70	23	40	5.00	200.00	---	41	5.00	205.00	---	42	5.00	210.00	---
31.	30	70	23	210	5.00	1,050.00	50.00	212	5.00	1,060.00	50.00	217	5.00	1,085.00	50.00
32.	31	70	23	300	5.00	1,500.00	---	320	5.00	1,600.00	---	345	5.00	1,725.00	---
33.	32	70	23	64	5.00	320.00	25.00	67	5.00	335.00	25.00	73	5.00	365.00	25.00
34.	33	70	23	30	7.00	210.00	---	58	7.00	406.00	---	71	7.00	497.00	---
35.	34	70	23	347	7.00	2,429.00	---	355	7.00	2,485.00	---	366	7.00	2,562.00	---
36.	35	70	23	4	5.00	20.00	---	4	5.00	20.00	---	6	5.00	30.00	---
37.	36	70	23	155	6.00	930.00	---	198	6.00	1,188.00	---	275	6.00	1,650.00	---
38.	37	70	23	275	5.00	1,375.00	300.00	290	5.00	1,450.00	300.00	310	5.00	1,550.00	300.00
39.	38	70	23	294	5.00	1,470.00	---	300	5.00	1,500.00	100.00	325	5.00	1,625.00	100.00
40.	39	70	23	5	6.00	30.00	---	7.00	6.00	42.00	---	9	6.00	54.00	---
Total.				4,791	---	27,288.00	550.00	5,110	---	28,192.00	650.00	5,620	---	32,102.00	1,300.00

*Statement showing lands in the Rainy Lake and Rat Root River territory belonging to the State and that is damaged by reason of not being able to drain.*

Sec- tion.	Town- ship.	Range.	Acres.	Value per acre.	Total value.
8	70	20	5.00	\$6.00	\$30.00
9	70	20	8.00	6.00	48.00
16	70	20	5.00	6.00	30.00
32	71	21	10.00	5.00	50.00
35	71	21	22.00	5.00	110.00
36	71	21	50.00	5.00	250.00
5	70	22	70.00	6.00	420.00
7	70	22	14.00	5.00	70.00
10	70	22	25.00	5.00	125.00
11	70	22	55.00	5.00	275.00
12	70	22	34.00	5.00	170.00
18	70	22	110.00	6.00	660.00
19	70	22	380.00	5.00	1,900.00
30	70	22	175.00	6.00	1,050.00
32	71	22	10.00	5.00	50.00
2	69	23	403.00	5.00	2,015.00
4	69	23	85.00	7.00	595.00
9	69	23	180.00	7.00	1,260.00
10	69	23	37.00	7.00	259.00
11	70	23	220.00	5.00	1,100.00
12	70	23	300.00	5.00	1,500.00
13	70	23	125.00	5.00	625.00
14	70	23	120.00	5.00	600.00
23	70	23	90.00	7.00	630.00
24	70	23	70.00	7.00	490.00
25	70	23	190.00	5.00	950.00
33	70	23	125.00	5.00	625.00
34	70	23	47.00	5.00	235.00
35	70	23	84.00	5.00	420.00
36	70	23	80.00	6.00	480.00
			3,129.00	.....	17,022.00





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## SETTLERS' EXHIBIT A.

## Rainy Lake and Rot Root River districts.

Private owners.	Descriptions.	Sec- tion.	Town- ship.	Range.	Level 498.			Level 499.			Level 500.			
					Acres flooded.	Value per acre.	Total value.	Acres flooded.	Value per acre.	Total value.	Acres flooded.	Value per acre.	Total value.	
<i>Represented by Irving J. Clark.</i>	Alice M. Clark.....	3	69	23										
	N. $\frac{1}{2}$ of NE. $\frac{1}{4}$ .....	11	69	23										
	Daisy M. Clark.....	26	70	23										
	SE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ and NW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ .....	26	70	23										
<i>Represented by John E. Samuelson.</i>	E. $\frac{1}{2}$ of SW. $\frac{1}{4}$ and Lot 6.....	27	71	23										
	NE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ .....	34	71	23										
	Lots 2, 3, and 4.....	27	71	23	116.0							59.0	\$30.00	\$1,770.00
	Emma A. Coxon.....	28	71	23	54.0									
	L. A. Ogaard and S. H. Clark.....	28	71	23	18.0									
	Lot 5.....	28	71	23										
	Lot 3.....	29	71	23										
	Lot 4.....	29	71	23	16.0									
	S. $\frac{1}{2}$ of NE. $\frac{1}{2}$ , NW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ and lot 1.....	34	71	23	3.0									
	Lot 4.....	34	71	23	80.0									
	Carl J. Erickson.....													
	Louis Olson.....	NE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ .....	35	71	23	40.0								
	John Ferguson.....	SE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ .....	35	71	23	19.0								
	Clifford Demers.....	NW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ .....	35	71	23	20.0								
	Bernt M. Weberg.....	SW. $\frac{1}{4}$ of NE. $\frac{1}{2}$ and lot 2.....	36	71	23	39.0								
	Dora C. Mertins.....	Part lot 2.....	28	71	23	4.0								
	Sadie Bancroft.....	Lots 1, 2, and 3.....	31	71	22	38.0								
	Bert T. Pease.....	Lot 3.....	32	71	22									
		Lot 2.....	33	71	22	46.0								
	W. S. Thomas.....	Lot 3.....	33	71	21	10.0								
	Gust Jackson Markstadt.....	Lots 4 and 5.....	34	71	21	40.0								
	Kate Bennett.....	Lots 1, 2, 3, and 4.....	4	71	21	50.0			53.0			57.0		
	Herman Lomker.....	NW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ .....	4	70	22									
		SE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ and N. $\frac{1}{2}$ of SE. $\frac{1}{4}$ .....	5	70	22	35.0			40.0			55.0		
R. H. Bennett.....	Lot 2 and SW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ .....	14	70	22	12.0			12.0			14.0			
Rhoda A. Sproul.....	Lots 1 and 2, and N. $\frac{1}{2}$ of SE. $\frac{1}{4}$ .....	17	70	22	42.0			45.0			50.0			
Gilbert Karlson.....	Lots 6 and 7.....	13	70	22										
	Lots 1 and NW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ .....	24	70	22	70.0			80.0			95.0			

Owner	Lot	Acres	Value	Value	Value	Value	Value	Value
Frederick Henemann	Lots 7, 9, and 10.	5	69	23	145.0	150.0	145.0	145.0
Mary Henrich	Lot 9, lot 10, and 13.	4	69	23	145.0	150.0	145.0	145.0
John Skoglund	N. 1/4 of T. 14 and S. 1/4 of SW. 1/4.	5	69	23	145.0	150.0	145.0	145.0
George Watson	N. 1/4 of S. 1/4.	6	69	23	145.0	150.0	145.0	145.0
	Lot 6.	6	69	23	145.0	150.0	145.0	145.0
	Lot 6, S. 1/4 of NW. 1/4, NE. 1/4 of SW. 1/4 and NW. 1/4 of SE. 1/4.	8	69	23	145.0	150.0	145.0	145.0
Thomas Watson	Lots 1, 5, and 7, and SW. 1/4 of NE. 1/4.	8	69	23	145.0	150.0	145.0	145.0
Martin Mathison	Lots 2, 3, and 4.	8	69	23	145.0	150.0	145.0	145.0
Hattie Barton	Lots 3 and 4.	9	69	23	145.0	150.0	145.0	145.0
	Lot 11.	3	69	23	145.0	150.0	145.0	145.0
	NE. 1/4 of NW. 1/4 and S. 1/4 of NW. 1/4.	10	69	23	145.0	150.0	145.0	145.0
Eva B. Grant et al.	S. 1/4 of SW. 1/4.	2	69	23	145.0	150.0	145.0	145.0
Rhoda A. Spraul	N. 1/4 of NW. 1/4.	11	69	23	145.0	150.0	145.0	145.0
John A. Sandstrom	Lot 8, and S. 1/4 of SW. 1/4.	24	70	23	145.0	150.0	145.0	145.0
	Lot 9.	26	70	23	145.0	150.0	145.0	145.0
	Lots 1 and 2.	27	70	23	145.0	150.0	145.0	145.0
	Lot 1.	34	70	23	145.0	150.0	145.0	145.0
Total					1,387.8	929.6	1,046.6	1,046.6

James Brennan and Josephine Brennan, lots 26, 27, 28, and 29 in block 4, township of Ranier section 30-71-23.

Anton Pillsbrom, lots 1 and 2 in block 4, township of Ranier section 30-71-23.

Edward Ek, lot 28, block 19, township of Ranier section 30-71-23.

W. S. Thomas, lot 3, block 5, township of Ranier section 30-71-23.

City of Ranier, streets and docks, township of Ranier section 30-71-23.

Fred Kelly, lots 25 to and including lot 34, township of Idlewood section 28-71-23.

M. B. Hay, lots 15 and 16, Township of Crystal Beach section 28-71-23.

On all the above lots, streets, and docks in Ranier, Idlewood, and Crystal Beach, I am not prepared to give the acreage overflowed under the different levels. Range 21 and below in St. Louis County. Range 22 and above in Koochiching County.



## STATEMENT BY THE WINNIPEG ELECTRIC RAILWAY CO.

## EXHIBIT 11.

## CHRONOLOGICAL HISTORY.

The company now known as the Winnipeg Electric Railway Co. is the successor, by amalgamation, purchase, or agreement, of the following companies whose principal objects were to supply electricity for light, heat, and power in and around the city of Winnipeg, in the Province of Manitoba, and to operate city, interurban, and suburban lines of electric railway.

The companies now merged in the Winnipeg Electric Railway Co. are the following:

*Manitoba Electric & Gas Light Co.*, incorporated in the year 1880 under the laws of the Province of Manitoba, with wide powers as to the sale and distribution of electric current in the Province.

*Winnipeg Street Railway Co.*, incorporated in the year 1882 under the laws of the Province of Manitoba, with power to construct and operate street railways in the city of Winnipeg, the parishes of St. Boniface east and west, St. Johns, St. James, and Kildonan by the force or power of animals or *such other motive power* as may be authorized by the council of said city and the municipalities or any of them.

*Northwest Electric Co. (Ltd.)*, incorporated June, 1889, under the Manitoba joint stock companies act "for the purpose and with the object of acquiring, building, constructing, erecting, and maintaining an electric lighting system or systems, electric street railways, electric motors, or other electrical power \* \* \* in the various cities, towns, and villages in the Province of Manitoba."

*Winnipeg Electric Street Railway Co.*, incorporated by an act of the Legislature of Manitoba in the year 1892. Authority was given to construct and operate a railway on the streets of the city and adjacent municipalities and to carry on the business of selling, licensing, and disposing of electric light, heat, or power.

*Winnipeg General Power Co.*, incorporated in the year 1902 by act of the Legislature of Manitoba, and was given the fullest powers of carrying on the business of electricity in the Province of Manitoba. It was specially provided that any amalgamation of the company with existing companies *should give the amalgamation the powers of the companies absorbed.*

All of the above companies were finally amalgamated under the name of the Winnipeg Electric Railway Co. in the year 1904. The

chronological steps leading up to this final amalgamation were as follows:

- 1880. Manitoba Electric & Gas Light Co.
- 1882. Winnipeg Street Railway Co.
- 1889. North West Electric Co.
- 1892. Winnipeg Electric Street Railway Co.
- 1894. Winnipeg Electric Street Railway Co. bought Winnipeg Street Railway Co.
- 1898. Winnipeg Electric Street Railway Co. bought Manitoba Electric & Gas Light Co.
- 1900. Winnipeg Electric Street Railway Co. bought North West Electric Co.
- 1902. Winnipeg General Power Co. formed.
- 1904. Winnipeg General Power Co. amalgamated with Winnipeg Electric Street Railway Co. under name of Winnipeg Electric Railway Co.—the present company.
- 1905. Winnipeg Electric Railway Co. purchased capital stock of the Suburban Rapid Transit Co.
- 1906. Winnipeg Electric Railway Co. purchased all of the capital stock of Winnipeg, Selkirk & Lake Winnipeg Railway Co. except a very few shares.
- 1911. Winnipeg River Railway Co. incorporated by special act of the Legislature of Manitoba.
- 1913. Winnipeg River Power Co. (Ltd.) granted letters patent under the companies act of the Dominion of Canada.

POWERS OF ABOVE FOUR SEPARATELY OPERATED COMPANIES.

*"The Suburban Rapid Transit Co."*—Incorporated by special act of the Legislature of Manitoba, assented to March 1, 1902, chapter 71. "For the purpose of constructing, maintain, equip, furnish, operate, alter, and keep in repair an electric railway with double or single tracks \* \* \* from some terminal point at the western boundary of the city of Winnipeg westward on both sides of the Assiniboine River to a point at or near the village of Headingly." Power is also given to sell electricity for light, heat, and power, etc.

8th February, 1904, chapter 86, special act passed granting further powers to build through and operate lines of railway through the rural municipalities of St. Francois Xavier and Portage la Prairie, and to or near the village of Stonewall. All the above subject to consent of municipal councils.

*Winnipeg, Selkirk & Lake Winnipeg Railway Co.*—Incorporated by special act of the Legislature of Manitoba assented to July 5, 1900. Power to construct railway northward from Winnipeg on the west side of Red River to West Selkirk or western shore of

Lake Winnipeg. Power to sell electric light, heat, and power and use streets of municipalities, subject to their consent. Municipalities of Kildonan, St. Pauls, St. Andrews, and Gimli, and the town of West Selkirk, effected.

8th February, 1904, act amended by special act, chapter 90. Additional powers to build railway lines and other works authorized by their act of incorporation in the rural municipalities of Kildonan, St. Pauls, St. Andrews, Springfield, St. Clements, Rosser, Rockwood, Assiniboia, Macdonald, and the town of St. Boniface, and the unorganized territory lying to the east of the municipalities of St. Clements, Brokenhead, and Springfield.

*Winnipeg River Railway Co.*—Incorporated by special act of the Legislature of Manitoba, chapter 117, assented to March 24, 1911. Power to build a railway to operate by steam or other power from a point at or near Lac du Bonnet to a point at or near Lake Winnipeg, at the mouth of the Winnipeg River. Capital stock, \$50,000.

*Winnipeg River Power Co. (Ltd.).*—Granted letters patent 29th October, 1913, under the companies act of the Dominion of Canada. Power to acquire and construct, maintain, operate, and dispose of water powers and water privileges and other works for the generation of electricity \* \* \* and generally to carry on the business of a power, heating, and lighting company in all its branches. Many other necessary powers granted. Capital stock, \$1,000,000.

#### STATISTICAL INFORMATION.

The first street cars in Winnipeg, drawn by horses, were operated on Main Street, October 24, 1882.

First electric car run from Main Street to River Park, July, 1891.

Winnipeg Electric Street Railway Co. started construction of lines in Winnipeg in September, 1892, and operated electric cars in competition with horse cars on Main Street until the Winnipeg Street Railway Co. sold out to them in 1894.

The first street cars, drawn by horses, operated on Main Street from City Hall to Fort Garry.

Mr. R. A. Sara, B. A. Sc., the sales manager of the city light and power department, in his very comprehensive and able history of the municipal undertaking, refers to the company as follows:

This company commenced operations when Winnipeg was a small town of only 1,500 inhabitants. \* \* \* The company grew up with the city and assisted materially in the city's growth, improving its plant and equipment from time to time as necessity demanded and earnings would permit.

In 1891, when Winnipeg Street Railway Co. started operating an electric car line from Main Street to River Park, the power was obtained from a small steam generating plant on the Assiniboine



River. This plant was enlarged from time to time. The generator that was used when Winnipeg Electric Street Railway Co. took over the business of Winnipeg Street Railway Co. is now used by Winnipeg Electric Railway Co. to run machinery in a repair shop.

1892. The Winnipeg Electric Street Railway Co. "was granted an exclusive franchise to operate electric railways in the city of Winnipeg for a period of 35 years from February 1, 1892, expiring February 1, 1927, when the city may assume ownership of the railway and plant upon payment of the actual value of same, which amount shall be determined by arbitration."

The Winnipeg Electric Street Railway Co.'s franchise was subject to the rights of the Winnipeg Street Railway Co., and the two systems, one operating partly by electricity and partly by horses—the Winnipeg Street Railway Co.—and the other operating by electricity—the Winnipeg Electric Street Railway Co.—continued to operate in competition in the city of Winnipeg, in some cases the lines paralleling one another, on Main Street, for instance. During the time the two systems were operated a rate war ensued, and in February, 1894, the Winnipeg Electric Street Railway Co. sold 50 tickets for \$1.

After considerable litigation, carried to the privy council, the privy council gave a decision in March, 1894, that the Winnipeg Street Railway Co. did not have an exclusive franchise, and in that year the Winnipeg Electric Street Railway Co. purchased the rights of the horse-car company—Winnipeg Street Railway Co.—and horse cars disappeared from the streets.

The population of Winnipeg has grown by leaps and bounds; according to assessment records:

1891.....	24, 068
1901.....	44, 778
1911.....	151, 958
1915 (estimated).....	210, 000

The Winnipeg Electric Street Railway Co. in June, 1893, was granted the right by the city of St. Boniface for a period of 40 years to operate street cars in St. Boniface (at the expiration of that period the town may take over the company's plant in the town), and at a subsequent date the company was granted the privilege of selling electric light and power in the town for the same period of time. Population of city of St. Boniface according to Canada census records was as follows:

1891.....	1, 553
1901.....	2, 019
1911.....	7, 483
1915.....	12, 307

and although more recent figures are not available, we believe the population has considerably increased since 1911.

The following is a record of the passengers carried on Winnipeg Electric Railway Co.'s lines:

1900.....	3,002,538
1905.....	13,081,249
1910.....	31,369,421
1914.....	58,489,987
1915.....	48,556,927

In 1900 only 16 miles of track was in operation, as against 108 in 1914. In 1900 the company operated 36 single-truck cars, as against approximately 350 in 1915. In addition to above there is approximately 60 miles of suburban track now in operation. In 1900 there were approximately 16,000 16-candlepower lamps in operation in Winnipeg. In 1915 it is estimated that there are from 600,000 to 800,000 16-candlepower lamps in use.

It will readily be seen from the foregoing figures that the growth of the demands made on the company's steam plant for power was very rapid, and it was evident to the company that the increasing number of manufacturing industries would require cheap power to insure their continued success. Realizing that power obtained from a water-power plant would be cheaper than that obtained from steam plants in the city of Winnipeg, the Winnipeg General Power Co., formed in the year 1902, made investigations as to the possibilities of obtaining power from the Winnipeg River, and came to the conclusion that that source would give a large saving on the cost of fuel power.

1903. The construction of a hydroelectric plant to give about 30,000 horsepower on the Pinawa Channel near Lac du Bonnet was commenced by Winnipeg General Power Co.

1904. Winnipeg General Power Co. amalgamated with Winnipeg Electric Street Railway Co. under the name of Winnipeg Electric Railway Co., and work on the power plant was continued by the new company.

1906. June 9, 1906, first transmission of power from new plant supplied to Winnipeg. Steady service started June 11, 1906. Power has been supplied practically continuously from this plant ever since.

1907. Hydroelectric plant at Pinawa completed at a cost of approximately \$3,055,000, and the necessary transmission lines and substations were built. The initial capacity of the plant was 30,000 horsepower.

The immediate result of the introduction of hydroelectric power in Winnipeg was a reduction in the price of electric light from 20 cents per kilowatt to 10 cents per kilowatt and the base rate for power was reduced from 12½ cents per kilowatt to 6 cents per kilowatt.

## SUMMARY RE POWER.

	Horsepower.
Hydroelectric horsepower installed.....	30, 630
Power available at minimum flow.....	28, 200
Peak load of the year (estimated).....	32, 000
Total hydroelectric available in the city.....	22, 500
Steam power station No. 1, Mill Street.....	16, 000
Steam power station No. 2, Assiniboine Avenue.....	6, 000
Total power now available in city.....	44, 500

*Transmission.*—The 3-phase, 60-cycle, 2,300-volt current delivered by the generators is transformed up to 66,000 volts for transmission to Winnipeg over a double circuit steel tower transmission line.

The length of transmission line is 65 miles.

*Distribution.*—The power so transmitted is delivered to substations and distributed in the cities of Winnipeg and St. Boniface, the towns of Transcona, Stony Mountain, and Stonewall, the rural municipalities of Fort Garry, Assiniboia, East Kildonan, West Kildonan, St. Andrews, St. Vital, St. Pauls, Rockwood, and is supplied in bulk to the West Selkirk municipal plant. Negotiations with other municipalities in the Province of Manitoba are now pending.

## THE STREET RAILWAYS.

The Winnipeg Electric Railway Co. owns and operates 108 miles of single-track street railway lines in the cities of Winnipeg and St. Boniface and immediate vicinity. They also control and operate the Suburban Rapid Transit Co.'s railway, which serves the municipality of Assiniboia and has a mileage of 21 miles, and the Winnipeg, Selkirk & Lake Winnipeg Railway Co., which has a mileage of 39 miles and serves the towns of Stonewall and Selkirk and the village of Stony Mountain, as well as a number of well-settled municipalities along its route.

The various suburban lines have been a great factor in building up the district around the cities of Winnipeg and St. Boniface and making the city markets available to the suburban residents, farmers and market gardeners.

Under local improvement by-laws in the city of Winnipeg alone Winnipeg Electric Railway Co. is charged with a total of \$1,523,602.93 for paving charges to date.

During the year 1914 the amount paid by Winnipeg Electric Railway Co. in cash to the city of Winnipeg for taxes, paving charges, percentage of gross earnings (5 per cent), and car license was \$228,352.44. In addition to this the company paid municipal and, Government taxes amounting to \$4,376.55, making a grand total of, \$292,728.

In the city of Winnipeg alone, Winnipeg Electric Railway Co. carries approximately 600 civic employees free every day. The pay rolls of the Winnipeg Electric Railway Co.'s and subsidiary company's,



excluding the gas industry, for 1914 amounted to \$1,432,500 and the company paid for materials and supplies \$1,206,379.73 during the same period. The greater portion of this sum was spent in the city of Winnipeg in connection with industries largely dependent on power from the Winnipeg River.

#### DECREASE IN ELECTRIC LIGHT AND POWER RATES IN THE CITY OF WINNIPEG.

Prior to June, 1906, electric light was sold in the city of Winnipeg at 20 cents per kilowatt-hour and power at 12½ cents per kilowatt-hour, with discounts for prompt payment.

In June 1906, when power from the water-power plant at Pinawa was introduced, the rates were cut practically in half and electric light was sold at 10 cents per kilowatt-hour and power at 6 cents, with discounts for prompt payment.

September, 1911, the rates were again reduced to 7½ cents for electric lighting and 3 cents base rate for power.

December 5, 1911, rates reduced to present rates, 3½ for electric light, with 10 per cent discount for payment within 10 days from date of bill. Power is now sold by the company for commercial and other purposes at from one-half cent to 3 cents per kilowatt-hour.

*Capital invested in industries owned by Winnipeg Electric Ry. Co. and controlled by it, excluding the gas undertaking, as at Dec. 31, 1914.*

Winnipeg Electric Ry. Co., railway, power, and light departments...	\$18,475,439.99
Suburban Rapid Transit Co., railway, power, and light departments .	551,418.27
Winnipeg, Selkirk & Lake Winnipeg Ry. Co.....	1,559,116.01

Total.....	20,585,974.27
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NOTE.—Winnipeg River Power Co. (Ltd.) and Winnipeg River Ry. Co. have been financed by Winnipeg Electric Ry. Co., which holds their stock.

On account of the overlapping of expenditures on the street railway and light and power department it is not possible to separate the above with any accuracy.

The following estimate of expenditures on light and power supply is approximate only:

#### General:

Preliminary expenses, purchase of company's office buildings and general.....	\$2,940,228
Hydroelectric plant.....	4,125,862
Steam plants and battery.....	1,589,116
Distribution system.....	2,133,576

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10,788,782

*Winnipeg Electric Railway Co. meters, connected load, etc.*

[Extracts from return made to the department of inland revenue, Apr. 6, 1915.]

Power meters in use .....	833
Lighting meters in use.....	15, 107
Approximate connected load:	
Incandescent lamps.....kilowatt ..	12, 825
Arc lamps.....do.....	345
Motors.....do.....	23, 788
Approximate number of—	
Incandescent lamps.....	247, 093
Arc lamps.....	532
Motors connected.....	31, 882
Approximate total yearly output.....kilowatt hours..	120, 000, 000
Connected load of street railways, 332 cars:	
Motors.....horsepower..	48, 990
Light.....do.....	600

*Number of employees of Winnipeg Electric Railway Co., Suburban Rapid Transit Co., and Winnipeg, Selkirk & Lake Winnipeg Railway Co. as of July, 1914, excluding gas industry.*

**Winnipeg Electric Railway Co.:**

Car sheds.....	162
Park and zoo.....	7
Power house.....	14
New steam plant.....	24
Construction.....	6
Track.....	185
Electric light and power shop.....	78
Substations.....	40
Transmission line.....	6
Motormen.....	11
Pinawa power plant.....	35
Office staff.....	72
Stores.....	7
Conductors.....	481
Motormen.....	477
Inspectors.....	30
Switchmen.....	12
	— 1, 647

**Winnipeg, Selkirk & Lake Winnipeg Railway Co.:**

General.....	89
Construction.....	103
	— 192

Suburban Rapid Transit Co.....	27
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Grand total ..... 1, 866

The above includes all employees in the light and power department, but owing to the overlapping of duties it can not be subdivided with any accuracy.

## WINNIPEG ELECTRIC RAILWAY CO. HYDROELECTRIC PLANT.

*Location.*—The hydraulic works and generating station are located on the Pinawa or Lee Channel, some 25 miles long, near Lac du Bonnet on the Winnipeg River, 65 miles east of Winnipeg, and about 7 miles east of the terminus of the Canadian Pacific Railway branch line at Lac du Bonnet.

*Hydraulic works.*—In order to secure ample water in the Pinawa Channel it has been improved and enlarged and the main channel of the Winnipeg River has been dammed a short distance below the mouth of the Pinawa Channel by a rock and cement dam. This dam, 40 feet high at midstream, consists of 1,332 feet of concrete-capped rock fill across the main channel connected with the banks on either side by concrete spillways, making a total length of 1,650 feet. The water in the Pinawa Channel flows to a control dam capable of returning the whole or part of the flow to the main river.

There are also two weir dams of timber-crib type across secondary channels.

The head varies from 35 to 41 feet, the normal head being considered to be 39 feet.

*Power.*—The continuous power available is about 28,200 horsepower on the turbine shafts.

*Generating plant.*—The plant now installed consists of 5 units of 4,144 horsepower each and 4 units of 2,400 horsepower each, or a total of 30,230 horsepower on the turbine shafts, and two exciters of 200 horsepower each.

Total horsepower installed, hydroelectric:

9 main units.....	30,230
2 exciters.....	400
	<hr/>
	30,630

## INCREASE IN STEAM PLANTS IN WINNIPEG AND STORAGE BATTERY PLANT AT MILL STREET.

Prior to the year 1906, when hydroelectric power was first used in Winnipeg, all electric light and power was supplied from a steam plant on Assiniboine Avenue in Winnipeg, owned by Winnipeg Electric Street Railway Co. This plant then had a capacity of about 5,000 horsepower.

In the year 1910 the capacity of the Assiniboine Avenue power house was increased by 1,000 horsepower.

In the year 1911 an auxiliary steam plant of 16,000 horsepower capacity was constructed at Mill Street adjoining the company's main substation, and was put in operation.



Adjoining the Mill Street substation in the year 1913 the company built a storage-battery house 41 by 194 feet and installed a 5,000-ampere-hour storage battery.

At the present time, March, 1915, the Mill Street station is capable of producing 16,000 horsepower from steam, and the Assiniboine Avenue plant approximately 6,000 horsepower.

At certain seasons of the year, under exceptional weather conditions especially, all of the company's steam power and the storage-battery plant is in use and operated to capacity.

These plants at Mill Street were originally intended to be stand-by plants to insure a continuous and reliable supply of current in case of an accident at the hydroelectric station.

#### WINNIPEG RIVER POWER CO. (LTD.).

Under the charter of the Winnipeg River Power Co. (Ltd.), the Winnipeg Electric Railway Co. is making arrangements to develop a large water power at Grand du Bonnet Falls on Winnipeg River, and has already spent considerable money to that end.

Under the provision of the charter of the Winnipeg River Railway Co., a railway has been constructed from Lac du Bonnet to the site, about 14 miles.

Winnipeg River Power Co. has acquired a great deal of land and intends to proceed with the development as soon as financial conditions improve so that it is possible to do so. The project will cost approximately \$6,000,000.

The Winnipeg River Power Co. and the Winnipeg River Railway Co. possess no assets other than sites, licenses, and leases of land, and will be financed by Winnipeg Electric Railway Co., which will hold the stock.

The issued capital stock of Winnipeg Electric Railway Co. at the present time is \$9,000,000, and there are approximately 400 shareholders.

Authority to guarantee bonds of the above companies was granted to Winnipeg Electric Railway Co. at the 1915 session of the Manitoba Legislature.

The following extract from "Manitoba Water Powers," Water Resources Paper No. 7, 1914, gives particulars re Grand du Bonnet Falls:

The Du Bonnet Falls site is about 66 miles from Winnipeg. The proposed scheme of development will ultimately concentrate there a head of 56 feet, made up of the Grand and Little du Bonnet Falls and the Whitemud Falls.

The particulars and estimates given may be summed up as follows:

Development.	Flow.	Head.	24-hour horse-power at 75 per cent efficiency.	Estimated cost.	
				Per horse-power.	Total.
	<i>c. f. s.</i>	<i>Fect.</i>			
Initial.....	12,000	46	47,000	\$77.19	\$3,628,000
Intermediate.....	20,000	46	78,700	66.69	5,235,000
Ultimate.....	20,000	56	95,500	68.60	6,551,000

The extra head for the ultimate development would be obtained by the removal of the Whitemud Falls.

#### GENERAL REMARKS.

Depending upon a continuous and reliable supply of cheap power from Winnipeg River, manufacturers have expended hundreds of thousands of dollars in Winnipeg and immediate vicinity, and any curtailment of water in the Winnipeg River would seriously affect these industries and prove a great source of loss to the city of Winnipeg and surrounding districts.

For instance, at the present time Winnipeg Electric Railway is supplying power from its hydroelectric plant to Ogilvie Flour Mills, which has a capacity of 3,000 barrels of flour and 500 barrels of rolled oats per day; to the Western Canada Flour Mills, which has a capacity of 5,500 barrels of flour per day; and to the Canada Cement Co., which has a capacity at its mill of 4,000 barrels of cement per day. Any interference with the continuous supply of current to these industries will throw a large number of men out of work and seriously affect many trades entirely dependent upon their products. A large number of small manufacturers also depend entirely on hydroelectric power in their business, and any increase in the cost of producing power would practically put these men out of business, as cheap power at the present time is one of the principal factors in their success.

Large blocks of power are also furnished by the company to the Canadian Pacific Railway Co. and the Canadian Northern Railway Co. for the operation of their various roundhouses and shops and to the Government of Manitoba for the agricultural college and other provincial buildings.

Strictly speaking, there is not a citizen in Greater Winnipeg who has not greatly benefited since this company first introduced hydroelectric power in Winnipeg, and paved the way for rate reductions, and made profitable manufacturing plants possible.

The demand is constantly increasing and the company's available supply of power is already spoken for. Every year sees an extension

of the company's lines into new territory, requiring additional power, and new plants opening up.

The company is confident that in the very near future there will be a demand for all the available power that can be developed, and have taken steps to increase its supply by securing an additional site at Grand du Bonnet Falls and commencing the construction of a plant to develop approximately 100,000 horsepower.

# CONTRACTS BETWEEN THE COMMISSIONER OF CROWN LANDS AND EDWARD W. BACKUS.

## ONTARIO & MINNESOTA POWER CO., EXHIBIT A.

*Contract 17th February, 1904.*

This indenture made in triplicate this seventeenth day of February, 1904, between:

His Majesty, represented by the honorable the commissioner of Crown lands for the Province of Ontario, hereinafter called the Government, of the first part, and Edward Wellington Backus, of the city of Minneapolis in the State of Minnesota, lumberman, and those associated or to be associated with him, hereinafter called the purchasers, of the second part.

Whereas the Rainy River in the district of Rainy River forms the international boundary between the Province of Ontario in the Dominion of Canada and the State of Minnesota, one of the United States of America, which said river in the neighborhood of the town of Fort Frances forms a valuable and extensive water power.

And whereas the municipal council of the township of McIrvine and the residents of the said town and township have at various times petitioned the Government to develop or procure the development of the said water power, somewhat the same might be utilized for municipal purposes and for manufacturing and milling in the said municipalities, thereby assisting in the development of the said municipalities and of the surrounding district.

And whereas application has been made by the purchasers for a grant in fee of such lands adjacent to the said river, and of such lands covered by the said river, and

*Contract 9th day January, 1905.*

This indenture made in triplicate this ninth day of January, A. D. 1905, between:

His Majesty, represented by the honorable the commissioner of Crown lands for the Province of Ontario (hereinafter called the "Government"), of the first part, and Edward Wellington Backus, of the city of Minneapolis in the State of Minnesota, lumberman, and those associated with him (hereinafter called the "purchasers"), of the second part.

Whereas the Rainy River in the district of Rainy River forms the international boundary between the Province of Ontario in the Dominion of Canada and the State of Minnesota, one of the United States of America, which said river in the neighborhood of the town of Fort Frances forms a valuable and extensive water power.

And whereas the municipal council of the town of Fort Frances and the municipal council of the township of McIrvine and the residents of the said town and township have at various times petitioned the Government to develop or procure the development of the said water power, so that the same might be utilized for municipal purposes and for manufacturing and milling in the said municipalities, thereby assisting in the development of the said municipalities and of the surrounding district.

And whereas application has been made by the purchasers for a grant in fee of such lands adjacent to the said river, and of such lands covered by the said river, and



of such privileges as are necessary to enable the purchasers to develop the said water power, and to render the same available for municipal, manufacturing, and milling purposes.

And whereas the said water power can be more advantageously developed, and more power produced by works embracing the entire width of the river and dealing with it as a whole, than by an independent development on the Canadian side of the international boundary, and it is therefore in the public interest to adopt such plan of development.

And whereas the purchasers are the owners in fee simple of the lands and water power on the Minnesota side of the international boundary opposite the said town of Fort Frances, and are desirous of obtaining from the government of the Province of Ontario a grant in fee of the lands and power on the Canadian side of the international boundary, for the purpose of developing the water power to the full capacity of the stream from side to side at high-water mark, and of utilizing such storage facilities as may be available for maintaining the river at such high-water mark, thereby rendering available a large amount of power on the Canadian side of the river for municipal purposes and for the operation of pulp or paper mills, flour and grist mills, and other manufacturing establishments.

And whereas it is necessary in order to carry out such a scheme of development that the purchasers should be permitted to construct a storage dam at the outlet of Lake Namekan at or near Kettle Falls, on the international boundary, and to set apart sufficient lands for the construction and maintenance of the said dam, and that they should also, if necessary, be in a position to create storage reservoirs on upper and lower Manitou Lake and Big Turtle Lake under conditions satisfactory to the Government by the construction of the necessary dams for that purpose, with the view of maintaining a more regular and uniform flow of water over the falls at Fort Frances, by reinforcing the waters of Rainy Lake.

And whereas the construction of the said dams and the maintenance of the

of such privileges as are necessary to enable the purchasers to develop the said water power, and to render the same available for municipal, manufacturing, and milling purposes.

And whereas the said water power can be more advantageously developed, and more power produced by works embracing the entire width of the river and dealing with it as a whole, than by an independent development on the Canadian side of the international boundary, and it is therefore in the public interest to adopt such plan of development.

And whereas the purchasers are the owners in fee simple of the lands and water power on the Minnesota side of the international boundary opposite the said town of Fort Frances, and are desirous of obtaining from the government of the Province of Ontario a grant in fee of the lands and power on the Canadian side of the international boundary, for the purpose of developing the water power to the full capacity of the stream from side to side at high-water mark, and of utilizing such storage facilities as may be available for maintaining the river at such high-water mark, thereby rendering available a large amount of power on the Canadian side of the river for municipal purposes and for the operation of pulp or paper mills, flour and grist mills, and other manufacturing establishments.

And whereas it is necessary in order to carry out such a scheme of development that the purchasers should be permitted to construct a storage dam at the outlet of Lake Namakan at or near Kettle Falls, on the international boundary, and to set apart sufficient lands for the construction and maintenance of the said dam, and that they should also, if necessary, be in a position to create storage reservoirs on upper and lower Manitou Lake and Big Turtle Lake, under conditions satisfactory to the Government by the construction of the necessary dams for that purpose, with the view of maintaining a more regular and uniform flow of water over the falls at Fort Frances, by reinforcing the waters of Rainy Lake.

And whereas the construction of the said dams and the maintenance of the

waters of Rainy Lake at a higher level during the low-water period will be of great advantage to navigation.

And whereas it is expedient and desirable in the interests of the town of Fort Frances, of the said township of McIrvine, and of the public generally, that the said water power be speedily developed to its full capacity and that an agreement be entered into to that end, upon the terms and subject to the conditions and stipulations herein contained.

And whereas the purchasers propose to form a joint-stock company under the provisions of the Ontario companies act for the purpose of acquiring this agreement and all the benefits and advantages appertaining thereto, and of assuming the obligations hereby incurred by the purchasers, and of carrying on the development and operation of the said water power.

Now this indenture witnesseth and it is hereby agreed by and between the purchasers and the government as follows, that is to say:

1. The government agrees to sell and the purchasers agree to buy the following lands and lands covered by water, being all and singular those certain parcels and tracts of land and premises situate, lying, and being in the town of Fort Frances and adjacent thereto, and being composed of the lands and lands covered by the waters of the Rainy River shewn and set out in the plan and description hereunto attached, bearing the signature of the commissioner of crown lands for Ontario, which said plan and description are hereby made part of this agreement, the lands in question being coloured red on the said plan, together with all water powers and privileges and all rights, easements, and appurtenances thereby belonging or appertaining, for and in consideration of the sum of five thousand dollars (\$5,000) of lawful money of Canada, payable in cash on the execution and delivery of this agreement, and in further consideration of the covenants and requirements hereinafter contained and of the special agreement to supply power or electrical energy to the town of Fort Frances and the

waters of Rainy Lake at a higher level during the low-water period will be of greater advantage to navigation.

And whereas it is expedient and desirable in the interests of the town of Fort Frances, of the said township of McIrvine, and of the public generally, that the said water power be speedily developed to its full capacity and that an agreement be entered into to that end, upon the terms and subject to the conditions and stipulations herein contained.

And whereas the purchasers to form a joint-stock company under the provisions of the Ontario companies act for the purpose of acquiring the said lands and water power and of taking over and acquiring this agreement and all the benefits and advantages appertaining thereto, and of assuming the obligations hereby incurred by the purchasers, and of carrying on the development and operation of the said water power.

Now this indenture witnesseth, that it is hereby agreed by and between the purchasers and the government as follows, that is to say:

1. The government agrees to sell and the purchasers agree to buy the following lands and lands covered by water, being all and singular those certain parcels or tracts of lands and premises situate, lying, and being in the town of Fort Frances and adjacent thereto, and being composed of the lands and lands covered by the waters of the Rainy River shown and set out in the plan and description hereunto attached, bearing the signature of the commissioner of crown lands for Ontario, which said plan and descriptions are hereby made part of this agreement, the lands in question being coloured red on the said plan, together with the lands or lands covered by water heretofore conveyed by the town of Fort Frances to His Majesty the King for the purposes of this agreement, together with all water powers and privileges, and all rights, easements, and appurtenances thereto belonging or appertaining, for and in consideration of the sum of five thousand dollars (\$5,000) of lawful money of Canada, payable in cash on the execution and delivery of this agreement, and in further consideration

township of McIrvine, as hereinafter set out, to such an extent as the said town or township may require.

2. The purchasers covenant and agree to construct a dam, conduit, or such other works on or near the said river at Fort Frances, in such location as may be determined by an engineer appointed by the government for that purpose, sufficient to develop power to the full capacity of the said river (including any increased capacity of said river by reason of the construction of storage dams or works) as ascertained by such government engineer, such dam to be built of solid masonry or concrete, and to be built of such character and of such dimensions as will make the same amply strong and safe for the purpose intended, and such work will be of such design as will fully provide for sufficient waste weirs as to obviate the danger in time of floods or freshets. The dams, head gates, waste weirs, and works in connection therewith or incidental thereto shall not be proceeded with unless and until the plans, drawings, and specifications for the same shall have been submitted to and approved by the lieutenant governor in council, which said plans, drawings, and specifications shall show the precise site and location of the said works: *Provided*, That the waters of Rainy Lake shall not at any time be raised to a higher level than high-water mark, as ascertained by such government engineer, and the height of water to be maintained in the said lake shall at all times be subject to such control and direction by the government as may be necessary to secure safety.

3. All power houses and buildings, machinery and appliances necessary for developing one-half the total power of the

of the covenants and requirements hereinafter contained and of the special agreement to supply power or electrical energy to the town of Fort Frances and the township of McIrvine, as hereinafter set out, to such extent as the said town or township may require.

2. The purchasers covenant and agree to construct a dam, conduit, or such other works on or near the said river at Fort Frances, in accordance with the plans hereto attached, sufficient to develop power to the full capacity of said river (including any increased capacity of said river by reason of the construction of storage dams or works), according to the plans hereto attached, approved of by the lieutenant governor in council, and which are hereby made a part of this contract, such dam to be built of solid masonry or concrete, and to be of such character and of such dimensions as will make the same amply strong and safe for the purposes intended, and such works will be of such design as will fully provide for sufficient waste weirs to obviate danger in time of floods or freshets. The dams, head gates, waste weirs, and works in connection therewith or incidental thereto shall not be proceeded with unless and until the plans, drawings, and specifications for the same shall have been submitted to and approved of by the lieutenant governor in council, which said plans, drawings, and specifications shall show the precise site and location of the said work: *Provided, however*, That notwithstanding anything hereinbefore contained, and notwithstanding the approval of the plan hereto attached, the waters of Rainy River shall not at any time be raised to a higher level than may be authorized by the government, and the height of water to be maintained in the said lake and the use or nonuse of the flash boards as shown on said plans shall at all times be subject to such control and direction by the government as in the opinion of the government may be necessary to insure safety and protection of property.

3. All power houses and building machinery and appliances necessary for developing the total power capable of devel-



said river shall be erected and maintained on the Canadian side of the international boundary, provided that the plans and location of such power house shall be subject to the approval of the lieutenant governor in council.

4. The purchasers covenant and agree to commence the said dam and other works forthwith after the approval of the plans, drawings, and specifications by the lieutenant governor in council and to fully complete the said dam and works in accordance with said plans, drawings, and specifications by the first day of May, 1906, and to develop and render permanently available for use on the Canadian side of the river by the said date not less than one-half the total amount of horsepower found by the government engineer to be capable of development at the said point (including increase in such power by reason of the construction and maintenance of storage dams or works), as provided in paragraph 2 hereof. And the purchasers further covenant and agree to expend upon such works the sum of fifty thousand dollars (\$50,000) within nine months from the date of such approval and one year from the date of the delivery hereof: *Provided*, That if the purchasers fail or neglect to erect the said dam and works and to render the said amount of power permanently available on the Canadian side by the said first day of May, 1906, or to expend upon the said works the sum of fifty thousand dollars (\$50,000) within the nine months from the date of such approval and within one year from the date of the delivery hereof, as above provided, then this agreement shall be null and void, and all monies paid by the purchasers shall be forfeited.

5. The purchasers covenant and agree that they will, from and after the said first day of May, 1906, deliver power to the said town of Fort Frances, and to the township of McIrvine, by the methods A, B, or C, hereinafter described, at the election of such municipalities, or either of them, for municipal purposes and for public utilities, but not for commercial

opment on the Canadian side of the said river, in accordance with said plans, shall be erected as fast as required for use and maintained on the Canadian side of the international boundary, provided that the plans and location of such power houses shall be subject to the approval of the lieutenant governor in council.

4. The purchasers covenant and agree to commence the said dam and other works forthwith after the approval of the plans, drawings, and specifications by the lieutenant governor in council, and to fully complete the said dam and works in accordance with said plans, drawings, and specifications, by the first day of January, 1907, and to develop and render available for the use on the Canadian side of the river by the said date, the total amount of horsepower to be capable of development, in accordance with said plans at the said point (including increase in such power by reason of the construction and maintenance of storage dams or works), as provided in paragraph two hereof. And the purchasers further covenant and agree to expend upon such works the sum of fifty thousand dollars (\$50,000) within the nine months from the date hereof, as above provided, then this agreement shall be null and void, and all the money paid by the purchasers shall be forfeited.

The purchasers covenant and agree that they will, from and after the said first day of January, 1907, deliver power to the said town of Fort Frances and to the township of McIrvine, by the method A, B, or C, hereinafter described, at the election of such municipalities or either of them, for municipal purposes and for public utilities, but not for commercial

purposes, which said power shall be kept constantly in operation and available 24 hours each day (save and except such time as may be necessary to replace machinery or for repairs), and the corporation shall have the right to elect to take the power or any portion of it (A) by cable or belt or other means of conveying the same direct from the power-house of the purchasers; (B) by ways of electrical energy delivered on the wires of the said corporation at the said power house; or (C) by electrical energy delivered to the premises of the corporations or to such other premises as the corporations may specify the same to be delivered within three miles from the power house of the purchasers. The corporations shall be entitled to take such portion or portions of the said power as the corporations may desire by any of the methods of delivery above mentioned, and for such purpose the purchasers shall install all water, wheels, electrical and other machinery, shafting, motors, connections, and appliances, with other attachments, necessary to deliver the said power as required by either or all of the methods above mentioned excepting that the corporations or public users may be required to furnish the electrical motors for propelling the machinery on or within their own premises, and the said power shall be supplied to the said municipal corporations for the purposes aforesaid at a specially favorable rate, which shall not in any event exceed twelve dollars (\$12) per horsepower per annum, where the same is taken under method A, or fourteen dollars (\$14) per horsepower per annum where the same is taken under method B. In the event of the said corporation requiring the said power or any portion thereof to be delivered under method C, the purchasers may charge, in addition to the rate fixed for delivery by method B, such sum as may be mutually agreed upon or determined as herein provided to cover the extra expense only necessarily incurred in such distribution. In the event of the said corporations taking such power or any portion thereof at the power house of the purchasers, the said corporations shall

purposes, which said power shall be kept constantly in operation and available twenty-four hours each day (save and except such time as may be necessary to replace machinery or for repairs), and the corporation shall have the right to elect to take the power or any portion of it (A) by cable or belt or other means of conveying the same direct from the power house of the purchasers; (B) by waves of electrical energy delivered on the wires of the said corporation at the said power house; or (C) by electrical energy delivered to the premises of the corporations, or to such other premises as the corporations may specify, the same to be delivered within three miles from the power house of the purchasers. The corporations shall be entitled to take such portion or portions of the said power as the corporations may desire by any of the methods of delivery above mentioned, and for such purpose the purchasers shall instal all water wheels, electrical and other machinery, shafting, motors, connections, and appliances, with other attachments necessary to deliver the said power as required by either or all of the methods above mentioned, excepting that the corporation or the public users may be required to furnish the electrical motors for propelling the machinery on or within their own premises, and the said power shall be supplied to the said municipal corporations for the purposes aforesaid at a specially favorable rate, which shall not in any event exceed twelve dollars (\$12) per horsepower per annum where the same is taken under method A, or fourteen dollars (\$14) per horsepower per annum where the same is taken under method B. In the event of the said corporations requiring the said power or any portion thereof to be delivered under method C, the purchasers may charge, in addition to the rate fixed for delivery by method B, such sum as may be mutually agreed upon, or determined, as herein provided, to cover the extra expense only necessarily incurred in such distribution. In the event of the said corporations taking such power or any portion thereof at the power house of the purchasers, the said corpo-



have the right of entering upon the lands and premises of the purchasers for the purpose of erecting all necessary connections, belts, cables, poles, or wires or other means of conveying or carrying said power, and for the purpose of retaining, maintaining, or operating same from time to time, and for all other purposes necessary to satisfactorily procure the delivery of such power, and for such purposes to enter the purchasers' powerhouses and premises as occasion may require, and no extra charge for rent shall be payable by the said municipalities for the use and occupancy of the lands and premises of the purchasers required for all poles or other structures or works of the municipalities for the transmission and distribution of the said power: *Provided*, That the purchasers shall not be required to deliver power to the said municipalities in less quantities than fifty horsepower at any one time or by any one of the above-mentioned methods: *Provided further, and it is specially agreed*, That should the corporations at any time deem the prices demanded by the purchasers excessive, or more than sufficient to allow the purchasers a fair profit, and in the event of the corporations, or either of them, being unable to agree with the purchasers as to such prices or as to any other matter arising in respect of the carrying out of these premises, the same may be referred to the lieutenant governor in council, who may settle and determine the same, and his finding shall be final and binding upon the parties in the same manner and to the same extent as if it were included in and a part of this agreement: *Provided, however*, That such prices and conditions as may be determined or agreed upon from time to time shall remain in force for at least five years before being subject to readjustment: *Provided also*, That the corporations shall in all cases give the purchasers three months' notice in writing of the amounts of power required and of the method of delivery by which it is desired the same shall be delivered.

6. The purchasers further covenant and agree that they will at all times sell or rent

rations shall have the right of entering upon the lands and premises of the purchasers for the purpose of erecting all necessary connections, belts, cables, poles, or wires, or other means of conveying or carrying said power, and for the purpose of repairing, maintaining, or operating same from time to time, and for all other purposes necessary to satisfactorily procure the delivery of such power, and for such purposes to enter the purchasers' power house and premises as occasion may require, and no extra charge for rent shall be payable by the said municipalities for the use and occupancy of the lands and premises of the purchasers required for all poles or other structures, or works of the municipalities for the transmission and distribution of the said power: *Provided*, That the purchasers shall not be required to deliver power to the said municipalities in less quantities than fifty horsepower at any one time, or by any one of the above-mentioned methods: *Provided further, and it is specially agreed*, That should the corporation, at any time deem the prices demanded by the purchasers excessive, or more than sufficient to allow the purchasers a fair profit, and in the event of the corporations, or either of them, being unable to agree with the purchasers as to such prices, or as to any other matter arising in respect of the carrying out of these presents, the same may be referred to the lieutenant governor in council, who may settle and determine the same, and his findings shall be final and binding upon the parties in the same manner and to the extent as if it were included in and a part of this agreement: *Provided, however*, That such prices and conditions as may be determined or agreed upon from time to time shall remain in force for at least five years before being subject to readjustment: *Provided also*, That the corporations shall in all cases give the purchasers three months' notice in writing of the amounts of power required and of the method of delivery by which it is desired the same shall be delivered.

6. The purchasers further covenant and agree that they will at all times sell or rent



and distribute to any person, firm, company, or corporation making application therefor any power or emergency reserved for use on the Canadian side of Rainy River and not already in use, at such prices and on such conditions as may be agreed upon between the parties, or in case of disagreement, at such prices and on such conditions as may be fixed by the lieutenant governor in council, and the purchasers shall provide and maintain all such generators and transmitters, machinery and appliances as may be requisite for the delivery of such power or energy by any of the methods A, B, or C, referred to in paragraph 5 hereof and shall afford to parties buying or renting power or energy from them all reasonable and necessary access to their buildings, lands, and premises for the purpose of erecting and maintaining wires, cables, or other means of carrying or conveying such power or energy, and shall erect such poles, wires, and other appliances as may be necessary for the distribution of power by the method C: *Provided*, That the purchasers shall not be obliged to erect new appliances or to extend their appliances for the purpose of delivering power by the method C to any party declining to accept any pay for at least one hundred horsepower or declining to furnish, if required, reasonable security for the payment of the purchase price or rent for such horsepower for such period as may be necessary to recoup the purchasers' outlay in providing such appliances, the method of distribution of such power and the appliances to be used to be subject to the approval of the lieutenant governor in council, and the streets, squares, lanes, or other public places along or across which such power is to be carried to be subject to the approval of the municipal council of the town of Fort Frances or of the township of McIrvine, as the case may be: *Provided*, That parties requiring power from the purchasers shall give three months' notice in writing of the amount of power required and of the method of delivery by which it is desired the same shall be delivered.

7. It is further agreed by and between the parties hereto that the fixing of the

and distribute to any person, firm, company, or corporation making application therefor any power or energy reserved for use on the Canadian side of Rainy River and not already in use, at such prices and on such conditions as may be agreed upon between the parties, or in case of disagreement, at such prices and on such conditions as may be fixed by the lieutenant governor in council, and the purchasers shall provide and maintain all such generators and transmitters, machinery and appliances as may be requisite for the delivery of such power or energy by any of the methods A, B, or C, referred to in paragraph 5 hereof and shall afford to parties buying or renting power or energy from them all reasonable and necessary access to their buildings, lands, and premises for the purpose of erecting and maintaining wires, cables, or other means of carrying or conveying such power or energy, and shall erect such poles, wires, and other appliances as may be necessary for the distribution of power by the method C: *Provided*, That the purchasers shall not be obliged to erect new appliances or to extend their appliances for the purposes of delivering power by the method C to any party declining to accept and pay for at least one hundred horsepower or declining to furnish, if required, reasonable security for the payment of the purchase price or rent for such horsepower for such period as may be necessary to recoup the purchasers' outlay in providing such appliances, the method of distribution of such power and the appliances to be used to be subject to the approval of the lieutenant governor in council, and the streets, squares, lanes, or other public places along or across which such power is to be carried to be subject to the approval of the municipal council of the town of Fort Frances or of the township of McIrvine, as the case may be: *Provided*, That parties requiring power from the purchasers shall give them three months' notice in writing of the amount of power required and of the method of delivery by which it is desired the same shall be delivered.

7. It is further agreed by and between the parties hereto that the fixing of the

maximum price herein provided for delivery of power to the said municipalities of Fort Frances and McIrvine forms a part of the consideration for this agreement, and for the transfer of the said lands, power, and privileges, and that the same shall not be used to the prejudice of the purchasers in any reference to the lieutenant governor in council to establish the price at which power shall be sold to other consumers, but the lieutenant governor in council shall be at liberty to fix said price at such figures as to him may seem just and proper.

8. The purchasers further covenant and agree that they will at all times retain and reserve for use on the Canadian side of the said international boundary line one-half of the total power capable of development from the said water power (including any increase thereof by reason of storage works) as determined by the government engineer and that they will not at any time divert or use the same or any portion thereof elsewhere.

9. The purchasers further covenant and agree that in leasing, selling or otherwise parting with such power or any portion thereof they will provide by contract therefor that such power so leased, sold or parted with, or any part thereof, shall not be farmed out or sold or leased at any greater price or remuneration actually paid therefor to the purchasers, and the purchasers shall not sell or otherwise dispose of the said power in any way that would deprive the public of the benefit of the prices to be fixed or determined as herein provided.

10. The purchasers further covenant and agree that in no case shall lessees or users of power or energy on the Canadian side of the international boundary line be charged higher rates or be subject to more onerous conditions than users or lessees of like power on the Minnesota side.

11. The purchasers covenant and agree that they will keep their works constantly

maximum prices herein provided for delivery of power to the said municipalities of Fort Frances and McIrvine forms a part of the consideration for this agreement, and for the transfer of the said lands, power, and privileges, and that the same shall not be used to the prejudice of the purchasers in any reference to the lieutenant governor in council to establish the price at which power shall be sold to other consumers, but the lieutenant governor in council shall be at liberty to fix said prices at such figures as to him may seem just and proper.

8. It is further covenanted and agreed that they will at all times retain and reserve for use on the Canadian side of the international boundary line four thousand horsepower, and will render the same permanently available for use on the Canadian side: *Provided further*, That when and so soon as the said four thousand horsepower so reserved shall be leased or in permanent use the purchasers will lease to any person, firm, or company on the Canadian side of the said boundary line any further power which may be required on the Canadian side and which may be unleased or not in permanent use.

9. The purchasers further covenant and agree that in leasing, selling or otherwise parting with such power, or any portion thereof, they will provide by contract therefor, they will provide by contract therefor that such power so leased sold or parted with, or any part thereof, shall not be farmed out or sold or leased at any greater price or remuneration actually paid therefor to the purchasers, and the purchasers shall not sell or otherwise dispose of the said power in any way that would deprive the public of the benefit of the prices to be fixed or determined as herein provided.

10. The purchasers further covenant and agree that in no case shall leasees or users of power or energy on the Canadian side of the international boundary line be charged higher rates or be subject to more onerous conditions than users or lessees of like amount of power on the Minnesota side.

11. The purchasers covenant and agree that they will keep their work constantly



in operation, so as to render power leased or sold by them available to the purchasers or lessees for twenty-four hours each day (save and except such time as may be necessary to replace machinery and for repairs).

12. The purchasers shall have the right to construct a storage dam at or near Kettle Falls at the outlet of Lake Namekan, and also at the outlet of lower Manitou Lake and Big Turtle Lake subject to such regulations and conditions as may be imposed by the lieutenant governor in council, and may raise the waters of the said lakes to a point not higher than the high-water mark as ascertained by an officer appointed by the government, and maintain them at such point, and the government agrees to lease to the said purchasers in \* \* \* rental of \$1 per acre such an area of land as may be found necessary at or near the said Kettle Falls for the purpose of constructing the said storage dam and other necessary works or structures in connection therewith: *Provided*, That if it should be made to appear to the satisfaction of the lieutenant governor in council that there is a bona fide and substantial demand for power in the neighborhood of the said Kettle Falls, which might be supplied therefrom, the purchasers, upon being required so to do by the lieutenant governor in council, shall, by works constructed and water wheels and other necessary machinery and appliances installed on the Canadian side of the international boundary line, develop the water power at the said falls to the full extent to which the same may be capable of development on the Canadian side of the international boundary line as determined by the government engineer to be appointed for such purpose or to such smaller extent as may be directed, and within such time as may be specified by the lieutenant governor in council. The height of water to be maintained in the said lakes shall at all times be subject to the control of the lieutenant governor in council: *Provided further*, That if the purchasers shall at any time develop a water power at Kettle Falls the total amount of power

in operation, so as to render power leased or sold by them available to the purchasers of lessees for twenty-four hours each day (save and except such time as may be necessary to replace machinery and for repairs).

12. The purchasers shall have the right to construct a storage dam at or near Kettle Falls at the outlet of Lake Namekan, and also at the outlet of lower Manitou Lake and of Big Turtle Lake, subject to such regulations and conditions as may be imposed by the lieutenant governor in council, and may raise the water of the said lakes to a point not higher than the high-water mark as ascertained by an officer appointed by the government, and maintain them at such point, and the government agrees to lease to the said purchasers in perpetuity at a rental of one dollar per annum such an area of land as may be found necessary at or near the said Kettle Falls, for the purpose of constructing the said storage dam and other necessary works or structures in connection therewith: *Provided*, That if it should be made to appear to the satisfaction of the lieutenant governor in council that there is a bona fide and substantial demand for power in the neighborhood of the said Kettle Falls, which might be supplied therefrom, the purchasers, upon being required so to do by the lieutenant governor in council shall, by works constructed and water wheels and other necessary machinery and appliances installed on the Canadian side of the international boundary line, develop the water power at the said falls to the full extent to which the same may be developed on the Canadian side of the international boundary line, as determined by the government engineer to be appointed for such purpose, or to such smaller extent as may be directed, and within such time as may be specified by the lieutenant governor in council. The height of water to be maintained in the said lakes shall at all times be subject to the control of the lieutenant governor in council: *Provided further*, That if the purchasers shall at any time develop a water power at Kettle Falls, the total



capable of development on the Canadian side shall be retained and reserved for use on the Canadian side, and shall not at any time be diverted or used elsewhere, and all the terms and conditions herein contained with reference to power at Fort Frances shall apply to the said power at Kettle Falls, save and except the conditions as to supplying power to the town of Fort Frances and the township of McIrvine: *Provided*, That the rights of the purchasers as to the storage of waters in the upper and lower Manitou Lake and Big Turtle Lake shall not include any rights in or to the water powers at or near the respective outlets thereof at or near the site or sites of any dam or dams constructed by the purchasers, but the government shall be free to deal with such water powers as occasion may require reserving to the purchasers the right of storing the waters of the said lakes subject to such conditions and regulations as to the government may seem necessary and proper.

13. It is further covenanted and agreed that any matters of dispute not herein expressly provided for between the purchasers and the said municipalities of Fort Frances and McIrvine, or between the purchasers and lessees or purchasers from them of water or other power shall be subject to the determination and direction of the lieutenant governor in council.

amount of power so developed on the Canadian side shall be retained for use on the Canadian side and shall not at any time be diverted or used elsewhere, and all the terms and conditions herein contained, with reference to power at Fort Frances, shall apply to the said power at Kettle Falls, save and except the conditions as to supplying power to the town of Fort Frances and the township of McIrvine: *Provided*, That the rights of the purchasers as to the storage of waters in the upper and lower Manitou Lake and Big Turtle Lake shall not include any rights in or to the water powers at or near the respective outlets thereof or at or near the site or sites of any dam or dams constructed by the purchasers, but the government shall be free to deal with such water powers as occasion may require, reserving to the purchasers the right of storing the waters of the said lake subject to such conditions and regulation as to the government may seem necessary and proper: *Provided, however*, That if the purchasers are of opinion that there is not a bona fide and substantial demand for power in the neighborhood of the said Kettle Falls, they may decline to develop the water power, in accordance with the provisions of this section, and on their so declining, the lieutenant governor in council shall have the power to determine all their right, title, and interest in, to, and of the said Kettle Falls or the lands adjacent thereto, and all their rights and privileges thereto herein set forth, and may lease the said power at Kettle Falls to any other person or company or dispose of it as may seem best, and that the default of the purchasers under this section shall not operate as a forfeiture of any of their rights, privileges, or franchise granted under the other clauses of this agreement.

that any matters of dispute not herein specially provided for between the purchasers and the said municipalities of Fort Frances and McIrvine, or between the purchasers and lessees or purchasers from them of water power shall be subject to the determination and direction of the lieutenant governor in council.

14. It is further understood and agreed that this agreement and the sale to the purchasers is made subject not only to the terms hereinbefore specified but subject also to the following terms and conditions:

(a) All the rights of the Dominion of Canada or the Province of Ontario as to navigation on the said river or rivers and the said lakes, and to the improvement thereof by the construction of a lock or canals or locks or canals, or otherwise, are reserved and accepted, and the Government of the Dominion of Canada or of the Province of Ontario shall have full power to enter upon the said lands and premises and to construct, maintain, and repair any canal, lock, dam, or other work or works necessary or desirable for the maintenance or improvement of navigation upon the waters affected thereby without let or hindrance and without compensation.

13. It is further covenanted and agreed

(b) The right of timber owners and others is reserved to float logs and timber down the said river or rivers and lakes for which purposes slides or other necessary works according to plans approved by the government are to be constructed by the purchasers.

(c) The purchasers shall construct proper fishways if required by the proper authorities.

15. The purchasers covenant with the government that they will not any time or at any place deposit empty, run or turn into or permit to be placed, deposited, emptied, run or turned into the said river or rivers or the said lakes any sawdust, chemicals, refuse or matters of any kind which may have the effect of polluting the said waters or of destroying, harming or driving away the fish therein.

16. The government agrees that as soon as the said dam at Fort Frances is completed and is in readiness for the water wheels by which one-half the total quantity of power available for use on the Canadian side of the river, a patent from the Crown shall issue to the purchaser of the said lands and of the said power, subject to forfeiture on breach of any of the conditions herein contained.

14. It is further understood and agreed that this agreement and the sale to the purchasers is made subject not only to the terms hereinbefore specified but subject also to the following terms and conditions:

(a) All the rights of the Dominion of Canada or the Province of Ontario as to navigation on the said river or rivers and the said lakes, and to the improvement thereof by the construction of a lock or canal, or locks or canals, or otherwise, are reserved and excepted, and the Government of the Dominion of Canada or of the Province of Ontario shall have full power to enter upon the said land and premises and to construct, maintain, or repair any canal, lock, dam, or other work or works necessary or desirable for the maintenance and improvement of navigation upon the waters affected thereby without let or hindrance and without compensation.

(b) The right of timber owners and others is reserved to float logs and timber down the said river, or rivers and lakes, for which purposes slides or other necessary works according to the plans approved by the government are to be constructed by the purchasers.

(c) The purchasers shall construct proper fishways if required by the proper authorities.

15. The purchasers covenant with the government that they will not at any time or any place deposit empty, run or turn into, or permit to be placed, deposited, emptied, run or turned into the said river or rivers or the said lakes, any sawdust, chemicals, refuse or matter of any kind which may have the effect of polluting the said waters, or of destroying, harming or driving away the fish therein.

16. The government agrees that as soon as the said dam at Fort Frances is completed and is in readiness for water wheels for one-half of the total quantity of power available for use on the Canadian side of the river, as hereinbefore provided, a patent from the Crown shall issue to the purchasers of the said lands and of the said power, subject to the forfeiture or breach of any of the conditions herein contained.



17. It is distinctly understood and agreed that the lands, rights, and privileges mentioned in this agreement are confined solely to lands, rights, and privileges the property of the Crown in Ontario under the control and administration of the government of Ontario and that no permission is given hereby to the purchasers to overflow or cause to be overflowed any lands not the property of the Crown in Ontario and not under the control and administration of the said government, and if damage is done by the erection of any dam or the construction of the works under this agreement, no recourse shall be had against the government in respect thereof.

18. The joint-stock company to be incorporated by the purchasers shall be composed of such persons and shall have such an amount of capital stock and such proportion paid up as shall be satisfactory to the government. It shall assume all liabilities and engagements which are assumed and entered into herein by the purchasers, and the government shall accept its personal liability instead of that of the purchasers in all respects except the agreement to expend the first fifty thousand dollars, as hereinbefore set forth, and except, as aforesaid, the purchasers' liability shall cease and determine when such liabilities and engagements have been assumed by such joint-stock company. It is understood and agreed that the purchasers shall give to Canadian lines of railway and steamboats the preference in the carriage of all goods or articles produced by them on the Canadian side of the said international boundary line at rates not higher than those charged by other lines of railway or steamboats from or between the same point or points.

19. It is further understood and agreed that nothing herein contained shall affect the rights of the inhabitants of the town of Fort Frances or the township of McIrvine or of the public to free access to the shore and waters of the said Rainy River and Rainy Lake and the use of the said waters for municipal and domestic purposes and that the purchasers shall not interfere with any street or streets now open or that

17. It is distinctly understood and agreed that the lands, rights, and privileges mentioned in this agreement are confined solely to lands, rights, and privileges the property of the Crown in Ontario under the control and administration of the government of Ontario and that no permission is given hereby to the purchasers to overflow or cause to be overflowed any lands not the property of the Crown in Ontario and not under the control and administration of the said government, and if damage is done by the erection of any dam or the construction of any works under this agreement no recourse shall be had against the government in respect thereof.

18. The joint-stock company to be incorporated by the purchasers shall be composed of such persons and shall have such an amount of capital stock and such proportion paid up as shall be satisfactory to the government. It shall assume all liabilities and engagements which are assumed and entered into herein by the purchasers, and the government shall accept its personal liability instead of that of the purchasers in all respects except the agreement to expend the first fifty thousand dollars (\$50,000), as hereinbefore set out, and except, as aforesaid, the purchasers' liability shall cease and determine when such liabilities and engagements have been assumed by such joint-stock company. It is understood and agreed that the purchasers shall give to Canadian lines of railways and steamboats the preference in the carriage of all goods and articles produced by them on the Canadian side of the said international boundary line at such rates not higher than those charged by other lines or steamboats from or between the same point or points.

19. It is further understood and agreed that nothing herein contained shall affect the rights of the inhabitants of the town of Fort Frances, or the township of McIrvine or of the public, to free access to the shore and waters of the said Rainy River and Rainy Lake and the use of the said waters for municipal and domestic purposes, and that the purchasers shall not interfere with any street or streets now open, or



may hereafter be opened to the said river, nor with any wharves, docks, or other structures now erected or hereafter to be erected for purpose of navigation.

20. It is further understood and agreed that failure on the part of the purchasers to carry out or comply with any of the conditions herein contained or any order or direction of the lieutenant governor in council made hereunder, after due notice given shall cause a forfeiture of the lands, rights and privileges in this agreement mentioned, but the government may at its option, require the payment of a penalty not exceeding \$100 per diem while the default has continued.

21. This agreement shall be binding not only upon the parties hereto but upon their heirs, executors, administrators, successors and assigns.

In witness whereof the commissioner of crown lands has hereunto set his hand and seal and the parties of the second part have hereunto set their hands and seals.

Signed, sealed and delivered in the presence of—

(Sgd.) THOS. W. GIBSON,

(Sgd.) E. J. DAVIS.

*Commissioner of Crown Lands.*

(Sgd.) ED. WELLINGTON BACKUS.

that may hereafter be opened to the said river, nor with any wharves, docks or other structures now erected, or hereafter to be erected for purposes of navigation, but excepting, however, from operation of this clause the construction of such buildings and works as are authorized under the terms hereof:

20. It is further understood and agreed that failure on the part of the purchasers to carry out or comply with any of the conditions herein contained, or any order or direction of the government or the lieutenant governor in council made hereunder, after due notice given and after a reasonable time has been given within which the purchasers may comply with the conditions in respect of which such default has been made, shall cause a forfeiture of the lands, rights and privileges in this agreement mentioned, but the government may, at its option, require the payment of a penalty not exceeding one hundred dollars (\$100) per diem while the default has continued:

21. This agreement shall be binding not only upon the parties hereto but upon their heirs, executors, administrators, successors and assigns.

In witness whereof the commissioner of crown lands has hereunto set his hand and seal, and the parties of the second part have hereunto set their hands and seals.

(Sgd.) A. C. MacKAY.

(Sgd.) EDWARD WELLINGTON

BACKUS. [SEAL.]

Signed, sealed and delivered in the presence of—

(Sgd.) GEO. W. YATES. [SEAL.]

WAR DEPARTMENT,  
OFFICE OF THE CHIEF OF ENGINEERS.

LEVELS OF LAKE OF THE WOODS.

[Memorandum Feb. 25, 1908.]

EXHIBIT 18.

I.—RELATION OF NORMAL LEVEL OF THE LAKE UNDER NATURAL CONDITIONS TO LEVEL OF 7.2 FEET ON THE WARROAD HARBOR GAUGE.

No information has been found in this office from which the normal level of the Lake of the Woods, under natural conditions, can be determined. The gauge at Warroad, thought to be the first effort on the part of the United States to determine the levels of the lake, was not established until May, 1899, at which time there was a dam or dams in existence at the outlet of the lake and the water level had been, it is believed, controlled in the interests of navigation for a number of years.

The following statement bearing upon the matter is found in a printed brief, received in this office in 1905, entitled:

Department of the Interior, General Land Office. In the matter of the application of the Minnesota Canal & Power Co. for the use of certain public lands of the United States in St. Louis and Lake Counties, Minn. Showing of applicant before Maj. George McC. Derby and Charles L. Potter, Corps of Engineers, U. S. A.

Durment & Moore, Baldwin, Baldwin & Dancer, H. G. Gearhart, of counsel.  
O. H. Simonds, Duluth, Minn., applicant's attorney.

For many years the Province of Ontario has done something to assist in maintaining the summer level of the waters of the Lake of the Woods in the interest of navigation. Prior to 1898 it had constructed and maintained a submerged wooden dam across the principal outlet of the Lake of the Woods and also a cofferdam in Ash Rapids, which held up the waters of Shoal Lake, a tributary to the Lake of the Woods. By 1898 the cofferdam had been taken out and the sole reliance for maintaining the summer level was on the submerged wooden dam.

In 1897 the Keewatin Dam Co., of Toronto, had constructed a stone dam across the principal outlet of the Lake of the Woods about 1 mile below the lower end of the lake at an expense of approximately \$150,000. This dam was built to produce power, but has never been used for that purpose.

\* \* \* \* \*

In the fall of 1897 and in the winter and early spring of 1898 the water of the Lake of the Woods fell to an unusually low stage and the vessel and commercial interests in that part of the country made representations to the Ontario government of the fact and urged that a dam, then lately constructed by the Keewatin Dam Co., should be utilized for the purpose of keeping up the summer levels of the lake. These representations led to negotiations and finally under date of June 22, 1898, a contract was entered into between the Keewatin Power Co. and Her Majesty, represented by the commissioner of public works of Ontario, under and by virtue of which the company agreed to have the stop blocks in place August 25, 1898, and the Province took possession of the dam; that the general policy of the government in relation to that

dam is set out in an affidavit in possession of the above-named applicant made by Frederick Chormann and that a certified copy of said contract is also in possession of said applicant, true copies of which affidavit and contract are hereto attached, and reference to the same is respectfully made.

The available reports relating to public works in Canada have been searched for information concerning the works referred to in the first paragraph quoted above, but the only statement found concerning works in that locality is the following, published on page LI of the annual report of the Minister of Public Works of Canada for the fiscal year 1887-88.

LAKE OF THE WOODS.

The sum of \$7,000 was voted as aid toward the construction of a dam at Rat Portage, in the district of Keewatin, at the extreme end of the Lake of the Woods, and the dam having been completed the amount was paid to the proper authorities.

From this statement it is surmised that the levels of the Lake of the Woods may have been artificially controlled since 1888, and search has therefore been made for information concerning the level sought to be maintained. No conclusive statement on this point has been found. The contract between the Dominion Government and the Keewatin Power Co., as printed in the brief above mentioned, suggests that the level proposed is "ordinary summer level," and assuming that "ordinary summer level" is synonymous with what the watchman at the dam terms "normal level of the lake" in a statement published on page 5 of House Document No. 92, Fifty-sixth Congress, second session (copy herewith), then, according to a deduction, also printed on that page, it corresponds to 6.31 feet on the Warroad gauge.

The references in the contract to the level to be maintained may be of interest, and the larger portion is therefore quoted as follows:

This agreement made the 22d day of June, A. D. 1898, between the Keewatin Power Co., hereinafter called the company, of the first part, and Her Majesty, represented herein by the commissioner of public works, hereinafter called the commissioner, of the second part.

Whereas the company have constructed a dam across the west branch of the Winnipeg River at Tunnell Island at or near the Lake of the Woods.

And whereas for the purpose of improving the navigation of the said lake it is expedient that the said dam should be improved by the addition of stop logs and otherwise.

And whereas it has been agreed by and between the parties hereto that in consideration of the sum of four thousand dollars and other stipulations and conditions herein contained that the said company will make all the necessary improvements, and will also permit the same to be used for the improvement of such navigation as aforesaid.

Now this indenture witnesseth, as follows:

The company covenant and agree to put in all necessary stop logs to fill the different openings a sufficient height to maintain the water of the Lake of the Woods at ordinary summer level, together with not less than two windlasses or winches furnished with chains, racking, and other necessary and latest appliances for raising or lowering the stop logs so far as the same may be required to properly regulate the height of the



water, such winches or windlasses to be of such construction as to enable any of the logs to be raised with ease by four men.

The company also covenant to provide and lay all such tracks as may be necessary to enable the winches or windlasses to be easily moved from opening to opening throughout the entire length of the dam, and that they put in all the stop logs and properly test the appliances for taking them out and replacing them to the satisfaction of the engineer to be named by the government of the Province, and that they will place the commissioner in possession of the entire plant in thorough working order complete in every respect for use by him or the officers or servants of his department for the purpose aforesaid on or before the twenty-fifth (25) day of August, 1898, and that they will also renew or repair the stonework and other permanent portions of the dam from time to time as may in the opinion of such engineer have become unsafe or unfit for further service.

The company also covenant and agree that they will provide a stop-log platform of sufficient size to receive all the stop logs when taken out of the different openings in the dam.

The company further covenant and agree that the commissioner shall have the right to regulate the height of the water and to control the dam as may be necessary.

In consideration of the foregoing covenants the commissioner agrees to pay to the company the sum of four thousand dollars, two thousand dollars when the work is completed to the satisfaction of the government engineer and certified to by him and two thousand dollars on the first day of May, 1899.

The commissioner also agrees to appoint and to pay the caretaker and such workmen as may be required to regulate the stop logs to be placed in the dam as aforesaid.

It is further agreed that should the company require to use the dam for power purposes they may terminate this agreement on giving one month's notice in writing to that effect, and thereafter the commissioner shall be relieved from further charge of the said dam, but it shall nevertheless be the duty of the company to maintain the water at ordinary summer level for such purposes as aforesaid at all proper time and times thereafter.

It is also agreed that the commissioner is not to be responsible for damages occasioned by reasons of the water being raised higher than ordinary summer level unless the same is raised for the purpose of and at the instance of the government or by their servants or agents.

## *II. Changes which have taken place in the level of the Lake of the Woods in recent years.*

Under date of February 15, 1908, Maj. Francis R. Shunk, Corps of Engineers, reported as follows:

Before work was begun at Warroad, a gage with arbitrarily assumed zero was set in the lake at that place. The mean level of the lake during the open season was assumed to be 7.2 feet, and the depths to be dredged regulated accordingly. This level was assumed from the best information obtainable; it was not based upon actual measurements. Gagings have been taken since that time and records are on file for the years 1899, 1903, 1904, 1905, 1906, and 1907. The mean level of the lake during the open seasons of these six years has been 7.15 feet, so that it appears that the assumed level was very nearly correct.

The lake is subject to considerable changes of level. High and low waters during the open seasons of the years above referred to were as follows:

Year.	Low water.	High water.	Year.	Low water.	High water.
1899.....	6.30	8.71	1905.....	4.70	9.00
1903.....	6.19	8.06	1906.....	5.60	8.20
1904.....	5.10	7.10	1907.....	5.10	8.90

There has been nothing unusual in the variations during the past year, and I am of the opinion that they were due to natural causes and not to the operation of the dams.

*III. Relation between present level of Lake of the Woods and datum of 7.2 feet on Warroad gauge.*

The officer in local charge has been requested to furnish this information, and it will be forwarded as soon as received.

*IV. Relation between datum of 7.2 feet on Warroad gauge and ordinary high-water mark of Lake of the Woods.*

As the Lake of the Woods is a navigable water of the United States, and Congress has exercised jurisdiction by making an appropriation for the improvement of Warroad Harbor with the view of a lake level of 7.2 feet, it is thought that the question of possible damage to riparian owners by the maintenance of that level must be considered upon the basis of the relation to ordinary high-water mark under natural conditions and not to the normal lake level. With reference to the former relation, Maj. Geo. McC. Derby, Corps of Engineers, reported to this office in 1906 as follows:

My assistant, Mr. Horace Dunaway, surveyor, who made the last resurvey of Warroad Harbor in December, 1905, reports that at the time of the survey the gauge read 8.1, and that the line between the aquatic vegetation of the lake (bulrushes) and the terrestrial vegetation of the banks was still several inches above the water level. It would therefore appear that the level 7.2 is well below ordinary high-water mark as it exists to-day.

By reference to the data furnished by Maj. Shunk, as given in Paragraph II above, it will be seen that the high water of 1899, 1903, 1905, 1906, and 1907 was above 7.2 feet on the Warroad gauge, and a table, published in the brief above mentioned, compiled from observations of George H. Kelly, superintendent of the Lake of the Woods Milling Co., Keewatin, Ontario, indicates that the high water of 1896, 1897, 1900, 1901, and 1902 was also above the 7.2-foot datum. According to his observations, as compiled in that table, the elevation (referred to the Warroad gauge) from June 18 to August 18, 1896, was 8.33 and above, reaching 8.95 on July 17, 1896, some months, it is thought, before the Keewatin Power Co.'s dam was constructed. The lake in its natural condition is known to have been subject to considerable fluctuations, due apparently to the naturally

constricted channels of its outlet and to the rocky character of a large portion of its watershed, permitting a rapid escape of precipitation to the lake basin. The narrative of Maj. Long's expedition to the source of St. Peter's River indicates that the level was often 5 or 6 feet higher than it was found in August, 1823, and the annual report of the Geological and Natural History Survey of Canada, 1885, of explorations of 1883 and 1884, when there were probably no dams at the outlets, states that the range of rise and fall is 10 feet.

WAR DEPARTMENT,  
OFFICE OF THE CHIEF OF ENGINEERS,  
*Washington, March 11, 1908.*

[Addendum to memorandum of Feb. 25, 1908, prepared Mar. 10, 1908.]

*Par. III. Relation between present level of Lake of the Woods and datum of 7.2 on Warroad gauge.*

Under date of March 3, 1908, Maj. F. R. Shunk, Corps of Engineers, the local charge of the Warroad Harbor improvement, reports that on February 29 the reading of Warroad gauge was 7.80, or six-tenths of a foot above the 7.2-foot datum. He also reports that daily gauge readings were begun May 1 and continued to October 31, 1907, and that since October 31, the gauge has been read about once a month. The fluctuations of the lake since May 1, 1907, with reference to the 7.2-foot datum, as compiled from those observations were as follows:

	Means.	Readings.	Below 7.2-foot datum.	Above 7.2-foot datum.
	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>
1907.				
May.....	5.42	.....	1.78	.....
June.....	6.12	.....	1.08	.....
July.....	6.43	.....	.77	.....
August.....	6.95	.....	.25	.....
September.....	7.85	.....		0.65
October.....	8.60	.....		1.40
October 31.....		8.60		1.40
November (no readings).				
December 20.....		8.40		1.20
December 31.....		8.40		1.20
1908.				
January 31.....		7.90		.70
February 29.....		7.80		.60

[Memorandum, May 6, 1912.]

Since the date (Mar. 10, 1908) of the preceding memorandum the next information relative to level of the Lake of the Woods is found in report by Maj. F. R. Shunk, dated January 11, 1911, on a complaint by citizens of shallow depths in Warroad Harbor. The complaint reported that the lake stage December 30, 1910, was 4.2 feet on the Warroad gauge. Maj. Shunk reports that—

7.2 feet is the mean lake level during navigation season.

6.2 feet is the mean low water during the navigation season.

6.6 feet is the mean lake level for the entire year.



He states that "1910 was by a large majority the dryest year on record in Minnesota. The usual spring rains did not occur, and the lake has been falling since last winter. \* \* \* It is reasonable to suppose that the normal lake level will be restored."

Under date of March 16, 1911, Maj. Shunk reported as follows:

Including the subsequent years (after 1906) the mean lake level during navigation season is 7 feet. As both exceptionally high and exceptionally low levels have occurred since 1899, when records begin, it is not likely that the ultimate mean level during navigation season will get beyond the limits 7 on one side and 7.2 on the other.

The highest level which has occurred in the Lake of the Woods since June, 1899, was 8.8, in October, 1907. The lowest level on record was 4.2, in December, 1910, making an extreme fluctuation, so far as our records go, of 4.6 feet.

In a report dated June 9, 1911, Maj. Shunk states that on March 16, 1911, the level of the Lake of the Woods was 4.2 feet, and adds:

This was unusually low. Instead of recovering, the lake has fallen still lower and has been for the past two months about 3.25. This is the lowest level of which we have record, though old settlers mention a time some 16 years ago when there was an even lower stage of water.

In a report dated June 30, 1911, supplemental to the report of June 9, 1911, Maj. Shunk describes three dams at the outlet of the Lake of the Woods and expresses the opinion that the open condition of the dam at Norman "is undoubtedly one cause, and a very considerable one, of the slow recovery of normal level in that lake."

Reference is made to a rise in the lake of 6 inches in one week, June 12 to 19, 1911, in consequence of the removal of temporary logging dams on the tributaries, and it is stated that further rise is expected.

Copies of the last two reports mentioned above were transmitted to the International Joint Commission with War Department letter dated November 22, 1911.

H. C. GOULD,  
*Assistant Engineer.*

**MEMORANDUM OF CHIEF RECLAMATION ENGINEER OF CANADA.**

[Filed with the Commission.]

OTTAWA, *March 28, 1916.*

J. B. CHALLIES, Esq., C. E.,

*Superintendent Dominion Water Power Branch,*

*Department of the Interior, Ottawa, Ontario.*

SIR: I beg to submit the following memorandum concerning the evidence and other information that has been submitted regarding areas and land values around the Lake of the Woods.

## REPORT OF CONSULTING ENGINEERS.

The report submitted by the consulting engineers to the International Joint Commission contains, on pages 35 to 44, inclusive, various tables showing the areas in Canada and the United States between contours ranging from 1054 to 1066 and under the different classes chosen by the engineers. The figures given in these tables were compiled from plans and surveys made by the engineers, and, together with the areas given in the table at the foot of page 18 of the report, comprise all of the lands covered by the surveys and reconnaissances made by the consulting engineers.

## CLASSIFICATION OF LANDS.

On pages 47 to 57 of the consulting engineers' report is given a description of the areas included under the different classes:

1. Cultivated lands.
2. Grass lands.
3. Grass lands with scattered poplar.
4. Deciduous trees.
5. Mixed deciduous and coniferous.
6. Coniferous swamp.
7. Willows and brush.
8. Open marsh and bog.
9. Sand.
10. Water.
11. Rock.

While very little is said with regard to the soil itself, the description of the vegetation leads to the belief that all the land that could be advantageously used for agricultural purposes is comprised within the first five classes. Of the other classes, it may be said that coniferous swamp varies greatly, but, owing to the cost of clearing and draining, must be considered of very small value indeed apart from the timber and wood. Of still less value are the classes "willows and brush" and "open marsh or bog." Sand is omitted from this estimate as having no agricultural value whatever. The sands near the mouth of Rainy River are referred to in the report of W. A. Johnston, geologist of the Department of Mines, on the Surficial Geology and Soils of the Rainy River District, pages 83 and 84, as having no agricultural value.

*Areas.*—The areas of land between the various contours are shown in much detail on pages 35 to 44, inclusive, of the engineers' report. No distinction is made, however, between the lands in Manitoba and those in Ontario, nor between Indian lands and lands otherwise owned.

The total areas between contours 1059 and 1063 under the classification adopted by the engineers may be summarized as follows:

1059-1063.

Class.	Culti- vated.	Grass- lands.	Grass- lands and scat- tered poplars.	Decidu- ous.	Mixed deciduous and coniferous.	Conif- erous swamp.	Brush and will- ows.	Open marsh and bog.	Total.
Canada.....	39.7	577.1	86.8	2,225.2	1,280.3	5,324.9	4,642.7	12,285.2	26,461.9
United States.....	173.5	881.1	490.6	3,172.7	260.0	3,521.3	3,299.8	4,457.9	16,256.9
Total.....	213.2	1,458.2	577.4	5,397.9	1,540.3	8,846.2	7,942.5	16,743.1	42,718.8

The above areas do not include the areas covered by reconnaissance sketches 1 to 190, which contain 6,853 acres of all classes between contours 1058 and 1063, including "water."

The above table shows that there are 213 acres of "cultivated" lands between contours 1059 and 1063, but there are no cultivated lands and no timber below contour 1060, and all of the land below 1059 is "open marsh or bog," except about 5 per cent, which is "willows and brush."

*Duration of lake stage.*—A reference to plate 139 of the report shows that if the ordinary regulated maximum be fixed at 1060.5 this maximum would be exceeded almost exactly the same percentage of the 21-year period as under natural conditions. The water would therefore be raised only  $1\frac{1}{2}$  feet above the legal maximum of 1059 adopted by the consulting engineers.

Plates 114 to 124 of the report show the actual level and the computed natural level of the Lake of the Woods from 1893 to 1913—a period of 21 years. An examination of the curve of computed natural levels shows, in almost every year, a rise in the level of the lake during the growing season. In order to show the duration of these higher stages at the different contours a table is submitted herewith covering the period May to September, inclusive. This table shows also the percentage of the time during which the different contours would be flooded and also the percentage of the seasons during which the flood would remain long enough to destroy the crop. For instance, contour 1058 was flooded for 57 per cent of the 21 seasons under consideration, contour 1058.5 for 43 per cent, and contour 1059 for 29 per cent of the seasons.

*Frequency of 20-day flood period.*—A diagram is submitted herewith showing the contours reached and held for 20 days by the lake during the growing seasons of the period 1893 to 1913.



*Duration of lake stage, May to September, 153 days.*

Season.	Lake stage.							
	1,057	1,058	1,058.5	1,059	1,059.5	1,060	1,060.5	1,061
1893.....	141	105	70	21				
1894.....	131	91	44					
1895.....	92							
1896.....	143	131	126	120	114	90		
1897.....	153	153	153	148	125	108	77	31
1898.....	87	35						
1899.....	151	135	122	110	100	90	59	
1900.....	5							
1901.....	153	153	140	126	21			
1902.....	106	52						
1903.....	153	113	70					
1904.....	91							
1905.....	102	82	67	57	41	120		
1906.....	153	86	231					
1907.....	30							
1908.....	153	100						
1909.....								
1910.....	61							
1911.....								
1912.....								
1913.....								
	1,905	1,236	823	582	401	308	136	31
Per cent of seasons...	76.2	57.1	42.9	28.6	23.8	19	9.8	4.9
Per cent of time.....	59.2	38.4	25.6	18.1	12.4	9.6	4.2	.96

<sup>1</sup> At elevation 1,059.9.

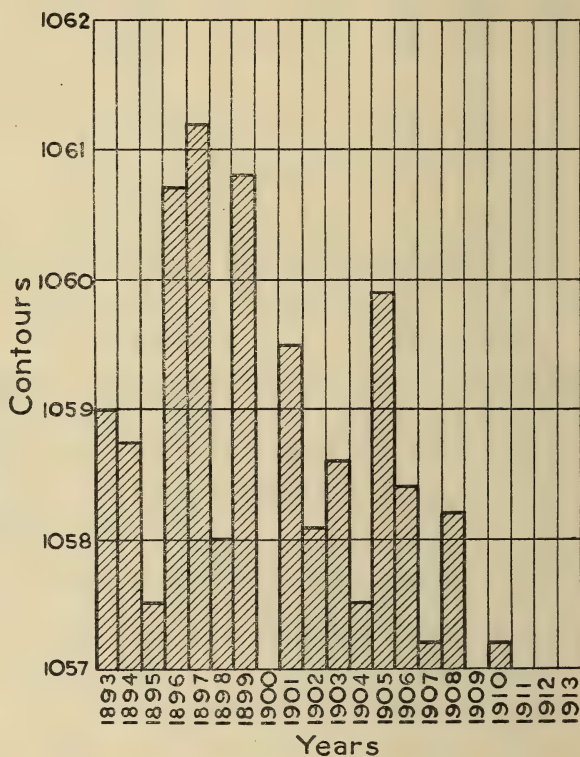
<sup>2</sup> At elevation 1,058.4.

It is submitted that a very few days of flooding is sufficient to destroy grain during the growing season and that 20 days of flooding is sufficient to destroy any crops except the coarser varieties of grass, such as marsh hay. In this connection it must be remembered that the lake rises and falls slowly and that 20 days of flooding means at least 20 additional days when the water is very close to the surface. It is apparent from an examination of the diagram that there could be no vegetable growth at or below contour 1,058, and, in fact, the shore line would probably be at or a little above contour 1,058. It is also apparent that there could be no crop of any value between contours 1,058 and 1,059. Not even during the dry years 1909 to 1913 could any crop be expected between contours 1,058 to 1,059, because 95 per cent of the area below 1,059 is stated on page 223 of the engineers' report to be "open marsh or bog" and, as such, could not be expected to produce any useful grasses after having been flooded almost every year for 14 years.

Between contours 1,059 and 1,060 no crops could be grown except wild hay, but the firmer soils might be used for pasture. Any attempts to grow cultivated crops would meet with almost continuous failure. Cultivation between 1,060 and 1,061 would also meet with many failures and would hardly prove profitable. Above 1,061 some cultivated crops might be profitably grown on suitable soils, but wheat, clover, and general farm crops would necessarily be confined to the area above 1,062 and would not even there be safe from destruction by the rising waters of the lake.

## DOMINION WATER POWER BRANCH

J. B. CHALLIES, Superintendent



## LAKE OF THE WOODS LEVELS

## DIAGRAM

SHOWING FREQUENCY OF 20-DAY FLOOD PERIOD  
UNDER NATURAL CONDITIONS

December, 1915.

*Thos. H. Dunn*  
Chief Engineer  
of Reclamation.

*Evidence of Mr. Holdahl.*—In the evidence given by Mr. Holdahl, a real estate agent, before the commission at Warroad in September, 1915, values were given for various classes of land in the vicinity of Rosseau. Mr. Holdahl stated that improved land with reasonably good buildings within  $1\frac{1}{2}$  miles of the town of Rosseau was worth from \$50 to \$75 per acre. Reasonably good buildings on a 160-acre block would cost from \$15 to \$20 per acre, which would leave the value of the land alone at \$35 to \$55 per acre. A less liberal allowance for the buildings of, say, \$10 to \$15 per acre, would leave the land at \$40 to \$60. In the light of this information an allowance of \$50 per acre for fully cultivated land in the immediate vicinity of Warroad seems sufficiently liberal. This allowance seems all the more reasonable when it is considered that the cost of clearing these lands and bringing them into a good state of cultivation is probably about \$35 per acre. In many cases, it will probably be found that the land when cleared will not be worth the cost of clearing if the ordinary wages be allowed for the work and no profit secured from the timber product.

The following is a brief summary of the values given by Mr. Holdahl in his evidence before the commission:

Improved lands in 160-acre blocks with reasonably good buildings and $1\frac{1}{2}$ miles from Rosseau.....	\$50-\$75
Lands partly in hay or under the plow, 160-acre, 17 or 18 miles from Warroad, with 75 acres cleared and poor buildings.....	15- 35
Improved land with buildings 14 or 15 miles from Warroad.....	40
Coniferous swamp, not including timber.....	\$5 and up.
Holdahl's appraised value of lands classified as deciduous trees.....	7- 12

*State and other sales.*—The sales of State-owned lands for the years 1913, 1914, and 1915, as reported by Mr. Preus, the State auditor, are as follows:

	Average price per acre.		
	1913	1914	1915
Rosseau County.....	\$9.45	\$6.78	\$6.22
Beltrami County.....	5.72	5.52	5.67
Koochiching County.....	6.55	6.85	6.28

Transfers of private lands in the vicinity of Lake of the Woods have not been numerous. Recently three quarter sections of unimproved land, being parts of sections 1, 11, and 12 in township 163 north, range 37 west, were sold at \$1,200 per quarter section, or \$7.50 per acre. This land lies about 5 miles northwest of Warroad and on the south side of the Canadian Northern Railway.

Regarding the public sale of State-owned swamp lands, it must be remembered that lands sold as "swamp lands" have, as a rule, some highland as well as lowland, and this point was brought out in the



evidence of Mr. Holdahl. This fact renders the State lands so far sold much more valuable than they would otherwise be. The terms on which the State lands are sold call for 15 per cent cash and the balance in 40 years at 4 per cent interest. These terms make the sales very attractive.

*Hearings at International Falls.*—While the reference does not ask the commission to ascertain land damages on Rainy Lake, the commission has thought fit to hear evidence as to that part which may throw some light on land values on Lake of the Woods. I am therefore drawing attention for that purpose to some of the evidence here given.

At International Falls in January, 1916, a number of witnesses were heard as to the value of the lands at the south end of Rainy Lake. These were mostly private owners, who stated that they did not want to sell their lands and gave evidence as to what price they were willing to take for their lands rather than the market value.

Geo. A. Ralph produced samples of vegetation and soils taken from the lands at the south end of Rainy Lake.

The vegetable samples were examined and classified by Mr. Oswald, and their food value was testified to by Prof. Thatcher.

Evidence of Mr. Oswald (botanist at University of Minnesota for the past 12 years): Examined samples of vegetation submitted by Mr. Ralph and found them to consist of sedges, rushes, cat-tails, blue flags, blue joint grass, and false red top. Mr. Oswald stated that one difference between a sedge and a grass is that a sedge has a solid triangular stem while a grass has a hollow round stem.

Evidence of Prof. R. W. Thatcher (professor of agricultural chemistry in the University of Minnesota): Prof. Thatcher divides vegetation found growing on swamp lands into three types, based on the food value to live stock.

Type No. 1 includes cat-tails, rushes, and lilies (including the wild flag), none of which have any feeding value whatever as on account of the bitter taste stock will not eat it.

Type No. 2 includes the coarser sedges and rushes of the broad-leaved family called tuleys. These have a certain food value, but alone are not sufficient to sustain life in animals with small stomachs such as the horse and hog. In animals with large stomach, such as cattle, the nutriment is still hardly sufficient to sustain the body weight unless supplemented by other food.

Type No. 3 includes the common wet-land grasses such as those shown by Mr. Ralph, viz, blue joint grass and false red top. These have about the same food value as wet straw.

Blue joint grass belongs to the best type of swamp grasses.

Evidence of George A. Ralph: Mr. Ralph is a surveyor and very familiar with the lands around Rainy Lake. He visited the State

and private lands and collected samples of the vegetation and soils from 24 different points.

*State lands.*—Regarding the State lands, Mr. Ralph says that those areas lying along the Rat Root River shown in dark green on Minnesota Exhibits D and E and lying below elevation 496 have no value at the present time and never can have much if any value, not even under natural conditions. It would make very little difference in the value of these lands if the dam at the outlet of Rainy Lake were removed and there was no control of the waters. It would be impossible to maintain water of Rainy Lake at elevation of meander lines, as elevation of these lines vary from 489 to 496 or 497.

In a period of 25 or 30 years all lands on Rainy Lake below contour 498 would be flooded fully one-half of the seasons to an extent sufficient to destroy farm crops. State lands shown on Minnesota Exhibit D lying above contour 496 are not worth more than \$5 per acre. Large areas of State lands in Koochiching County have been offered at less than \$5 but found no bidders.

Tracts above contour 496, with no timber, are not worth more than \$5 per acre. Up to contour 500, or 4 feet above the water, would have little difference in value unless there are some special features. State lands are for the most part inaccessible except by water. There are few settlers on the State lands, but some drainage has been undertaken just east of Ericksburg.

The line between the upland vegetation and water grasses is between 496 and 497.

Water vegetation consists of rushes, sedges, and coarse grasses such as certain kinds of blue joint and wire grasses. It also includes willows, tamarack, spruce, cedar, and balm of Gilead. Certain poplar, ash, and elm will live for a long time in water.

Upland vegetation consists of red top, the sandy and more nutritious kinds of blue-joint grasses, timothy, and clover.

The class of vegetation on the low-lying lands around Rainy Lake is substantially the same as that around Lake of the Woods.

There is muskeg at the eastern end of Rat Root Lake.

Muskeg is swampy land in which the peat or soil of the surface is floating. When you walk over it it will act as a blanket on the water and will undulate. It includes floating bog. Muskegs never contain timber of any value, but sometimes they support a little stunted tamarack or spruce. The depth of peat must be 3 to 4 feet and upward in order to constitute a muskeg.

There is no grass or stumpage of commercial value within the area colored green on State Exhibit D.

State lands on Lake Kabetogama, between contours 505 and 508, are below the essential high-water mark on the lake and are liable to

be flooded at any time, and are under water much of the time. They have absolutely no value.

Between contours 508 and 510 on Lake Kabetogama the lands have a value not exceeding \$5 per acre, but could not be sold at the present time for anything. Even between contours 510 and 515 the value does not exceed \$5 per acre.

Of the lands shown in heavy blue on State Exhibit E, 60 to 70 per cent are muskeg lands and without roads.

The values given for lands shown on State Exhibits D and E would not be altered if there were no control on Rainy Lake or Rainy River.

*Settlers' lands.*—These lands are higher and better than the State lands. They have no value if below contour 508 in Lake Kabetogama district or if below 496 in the Rainy Lake district. Between contours 496 and 498 in Rainy Lake district the settlers' lands are worth from \$5 to \$8 or \$10 per acre.

There are a few farms near Ericksburg that are pretty fair farms, and between contours 498 and 500 they would be worth \$10 to \$15 per acre. Without control on the lakes they would be worth about the same.

There are very few sandy beaches around the south shore of Rainy Lake. The shore is mostly rock or swamp.

The high-water mark observed on the trees is at elevation 497.6 to 497.8.

The water on Rainy Lake  $2\frac{1}{2}$  miles above the dam is from one or two tenths to six-tenths of a foot higher than the water at the dam.

The grass samples were taken within a foot or two of the water's edge.

Hay land in the vicinity of Rainy Lake on which you are sure of getting a crop every year is worth at the present time \$8 to \$10 per acre.

#### LAKE OF THE WOODS.

*Unit values.*—In order to arrive at a scale of unit values it is necessary to consider the land and buildings separately. The following list of acre values is based on the evidence of Mr. Holdahl and applies only to lands at the higher elevations back from the lake, as the values in the accompanying schedules are graded down according to elevation. They do not include the value of any buildings located on the lands:

Cultivated land, according to location.....	\$35. 00–\$50. 00
Grass land, according to location.....	15. 00– 25. 00
Grass land and scattered poplar, according to location.....	12. 00
Deciduous trees.....	6. 00– 15. 00
Deciduous and coniferous, mixed, according to location.....	6. 00– 15. 00
Coniferous swamp, according to location.....	4. 00– 6. 00
Willows and brush, according to location.....	3. 00– 4. 00
Open marsh and bog, according to location.....	. 50– 2. 00



These prices are applicable only to the areas coming under the classification to which they belong and may not be used as an average price to be applied to a quarter-section or other legal subdivision composed of lands of mixed classification. This is important to remember when comparing these values with sale prices of quarter-sections or with values given in evidence. In nearly all cases quotations on "coniferous swamp," for instance, are for subdivisions in which coniferous swamp predominates but in which there are other lands of greater value but of less extent. This would lead to too high a value for purely coniferous swamp.

The unit values for lands around the Lake of the Woods, within the different contours between 1059 and 1063, are shown in the following schedules:

*Schedule of values, Lake of the Woods lands.*

CONTOUR 1062-1063.<sup>1</sup>

Classification.	Topographical sheets.							
	10	9 and 11	s	12, 13, and 14	7	15 and 16	1 to 6, and 17 to 22	23, 24, and 25
Cultivated land.....	\$45.00	\$35.00	.....	\$30.00	.....	.....	\$30.00	.....
Grass land.....	23.50	18.50	.....	13.50	.....	\$13.50	13.50	\$13.50
Grass land and scattered poplar.....	.....	.....	.....	.....	.....	10.50	.....	.....
Deciduous and mixed.....	14.50	11.50	\$7.50	7.50	\$6.50	6.50	5.50	5.50
Coniferous.....	5.50	5.50	5.50	3.50	3.50	3.50	3.50	3.50
Willows and brush.....	3.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Open marsh or bog.....	2.00	1.75	.50	1.75	.50	1.75	1.75	1.00

CONTOUR 1061-1062.

Cultivated land.....	\$40.00	\$30.00	.....	\$25.00	.....	.....	\$25.00	.....
Grass land.....	22.00	17.00	.....	12.00	.....	\$12.00	12.00	\$12.00
Grass land and scattered poplar.....	.....	.....	.....	.....	.....	9.00	.....	.....
Mixed deciduous and coniferous.....	14.00	11.00	\$7.00	7.00	\$6.00	6.00	5.00	5.00
Coniferous.....	5.00	5.00	5.00	3.00	3.00	3.00	3.00	3.00
Willows and brush.....	3.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Open marsh or bog.....	2.00	1.50	.50	1.50	.50	1.50	1.50	1.00

CONTOUR 1060-1061.<sup>1</sup>

Cultivated land.....	\$25.00	\$20.00	.....	.....	.....	.....	.....	.....
Grass land.....	20.50	15.50	.....	\$10.50	.....	\$10.50	\$12.00	\$10.50
Grass land and scattered poplar.....	.....	.....	.....	.....	.....	7.50	.....	.....
Mixed deciduous and coniferous.....	13.50	10.50	\$6.50	6.50	\$5.50	5.50	4.50	4.50
Coniferous.....	4.50	4.50	4.50	2.50	2.50	2.50	2.50	2.50
Willows and brush.....	2.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Open marsh or bog.....	2.00	1.25	.50	1.25	.50	1.25	1.25	1.00

<sup>1</sup> The values in the above schedule are to be reduced by 10 per cent. except the values of cultivated land in topographical sheets 9, 10, and 11, on account of the total loss suffered during periods of extreme high water.

CONTOUR 1059-1060.<sup>2</sup>

Cultivated land.....	.....	.....	.....	.....	.....	.....	.....	.....
Grass land.....	\$19.00	\$14.00	.....	\$9.00	.....	\$9.00	\$12.00	\$9.00
Grass land and scattered poplar.....	.....	.....	.....	.....	.....	6.00	.....	.....
Mixed deciduous and coniferous.....	13.00	10.00	\$6.00	6.00	\$5.00	5.00	4.00	4.00
Coniferous.....	4.00	4.00	4.00	2.00	2.00	2.00	2.00	2.00
Willows and brush.....	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Open marsh or bog.....	2.00	1.00	.50	1.00	.50	1.00	1.00	1.00

<sup>2</sup> The values in the above schedule are to be reduced by 50 per cent in each case on account of the total loss suffered during periods of extreme high water.

In order to apply the values given in the above schedules to the acreage coming under the different classes, separate schedules were prepared for each contour. These schedules accompany and form a part of this memorandum. They give the acreage, unit value, and total value for each class, together with the total value of all classes combined for each sheet. A separate schedule was prepared for each contour in Minnesota, Ontario, and Manitoba.

In the application of the unit values given in the schedule to the areas within contours 1059 to 1060 and 1060 to 1061, a reduction of 30 per cent was made in the former and 10 per cent in the latter. This was done on account of the total loss occurring during the high-water period.

#### SUMMARY.

The totals of the estimated values of the lands between the different contours in Minnesota, Ontario, and Manitoba, based on the areas comprised within topographical sheets Nos. 1 to 25, are collected in a separate schedule and attached hereto.

The totals for the separate States or Provinces are as follows:

State or Province.	Sheets 1 to 25 (1059- 1063).
Minnesota.....	\$71,560.41
Ontario.....	36,595.95
Manitoba.....	26,859.61
Total.....	135,015.97

These amounts are intended to represent the estimated value of all the lands between contours 1059 and 1063 exclusive of buildings and those areas coming under the classification "sand," "rock," and "water," and also exclusive of the areas shown on reconnoissance sketches 1 to 190, which can not at present be separated from the water areas and areas between 1058 and 1059.

Your obedient servant,

THOS. H. DUNN,  
*Chief Engineer of Reclamation.*

Two exhibits not printed are especially mentioned. At the hearing in September, 1915, at page 237, House Document 27, Sixty-first Congress, first session, was received and marked "Exhibit E." It consists of a letter from the Secretary of the Interior transmitting a detailed report of a drainage survey of certain wet, overflowed, or swampy lands ceded by the Chippewa Indians in Minnesota. It is dated May 13, 1909, and entitled "Drainage Survey of Certain Lands in Minnesota."

At the final hearing in February, 1916, at page 457, a document of the Department of the Interior of Canada, water power branch, was received and marked "Exhibit 20." It consists of and is entitled "Regulations Governing Water Power Rights in the Provinces of Manitoba, Saskatchewan, Alberta, and the Northwest Territories."

## LAWS OF THE UNITED STATES RELATING TO RAINY RIVER DAM.

The acts of Congress relating to the dam across Rainy River at International Falls, Minn., are as follows, reference being to United States Statutes at Large:

- Chapter 238, volume 30, page 398. Approved May 4, 1898.
- Chapter 346, volume 31, page 167. Approved May 4, 1900.
- Chapter 1305, volume 32, page 485. Approved June 28, 1902.
- Chapter 797, volume 33, page 814. Approved February 25, 1905.
- Chapter 194, volume 35, page 273. Passed over veto, May 23, 1908.

## CANADIAN LAWS, ETC., RE ONTARIO AND MINNESOTA POWER CO.

Agreement between Government of Ontario and Edward Wellington Backus, February 17, 1904.

Agreement between Government of Ontario and Edward Wellington Backus, January 9, 1905.

Order in council, Ontario, January 13, 1905.

Letters patent, Ontario, January 13, 1905.

Order in council, Canada, January 31, 1905.

Act, Parliament of Canada, chapter 139, 1905.

Order in council, Canada, September 19, 1905.

Act, Legislature of Ontario, chapter 132, 1906.

Agreement between Government of Ontario and Edward Wellington Backus, November 20, 1906.

Order in council, Ontario, January 27, 1909.

Act, Legislature of Ontario, chapter 26, 1909.

Permit, Railway Commission of Canada, January 18, 1910.

License, Inland Revenue Department, Canada, June 11, 1910.

Agreement between Government of Ontario and Ontario and Minnesota Power Co., June 2, 1910.

Order in council, Ontario, June 2, 1910.

Act, Legislature of Ontario, chapter 7, 1911.

Supplementary letters patent, Ontario, April 25, 1911.

Act, Legislature of Ontario, chapter 152, 1912.

## CERTIFICATE AS TO ASSESSED VALUE OF LAND.

(EXHIBIT No. 14.)

I, the undersigned, auditor of the county of Beltrami in the State of Minnesota, in whose custody the assessment books and records of the said county are, do certify that the full value of the parcels of lands described below, and of the improvements and structures thereon, for the years 1914 and 1915, was, according to the said assessment rolls, the amounts mentioned below, and that the said values are a correct transcript from said assessment rolls.

Witness my signature and seal,

[SEAL.]

J. L. GEORGE,

*County auditor, County of Beltrami.*



## TOWNSHIP 161 NORTH, RANGE 32 W., 5.

Section.	Part.	Value of land.	Value of improvements.
12	S. $\frac{1}{2}$ of NW $\frac{1}{4}$ .....	\$600.00	-----
	SW. $\frac{1}{2}$ of NE $\frac{1}{4}$ .....	400.00	-----
	Lot 1.....	400.00	\$60.00
10	SE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ .....	400.00	70.00
	S. $\frac{1}{2}$ of SW. $\frac{1}{4}$ .....	-----	-----
11	NW. $\frac{1}{2}$ of SW. $\frac{1}{4}$ .....	400.00	-----
	S. $\frac{1}{2}$ of SW. $\frac{1}{4}$ .....	800.00	-----
15	E. $\frac{1}{2}$ of NW. $\frac{1}{4}$ .....	800.00	90.00

## TOWNSHIP 162 NORTH, RANGE 33 W., 5.

8	E. $\frac{1}{2}$ of NW. $\frac{1}{4}$ .....	\$960.00	-----
	W. $\frac{1}{2}$ of NE. $\frac{1}{4}$ .....	960.00	\$160.00
13	W. $\frac{1}{2}$ of NW. $\frac{1}{4}$ .....	960.00	125.00
14	SE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ .....	480.00	-----
	NE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ .....	480.00	-----
15	SW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ .....	480.00	150.00
16	SW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ .....	480.00	-----
	S. $\frac{1}{2}$ of NW. $\frac{1}{4}$ .....	960.00	-----
	NW. $\frac{1}{2}$ of NW. $\frac{1}{4}$ .....	480.00	300.00
	SE. $\frac{1}{4}$ .....	1,720.00	165.00
21	NW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ .....	483.00	-----
22	NE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ .....	480.00	-----
	S. $\frac{1}{2}$ of SE. $\frac{1}{4}$ .....	960.00	200.00
26	W. $\frac{1}{2}$ of SW. $\frac{1}{4}$ .....	966.00	-----
27	NE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ .....	483.00	-----
	NW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ .....	480.00	-----
28	W. $\frac{1}{2}$ of NE. $\frac{1}{4}$ .....	960.00	-----
	E. $\frac{1}{2}$ of NW. $\frac{1}{4}$ .....	960.00	250.00
35	NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ .....	483.00	-----

## TOWNSHIP 162 NORTH, RANGE 32 W., 5.

19	E. $\frac{1}{2}$ of SE. $\frac{1}{4}$ .....	\$786.00	-----
20	W. $\frac{1}{2}$ of SW. $\frac{1}{4}$ .....	788.00	\$150.00
	E. $\frac{1}{2}$ of SW. $\frac{1}{4}$ .....	840.00	-----
	E. $\frac{1}{2}$ of SW. $\frac{1}{4}$ .....	788.00	-----
	SW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ .....	394.00	-----
29	S. $\frac{1}{2}$ of SW. $\frac{1}{4}$ .....	945.00	-----
	NE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ .....	420.00	-----
	NW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ .....	525.00	-----
30	SE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ .....	525.00	-----
31	E. $\frac{1}{2}$ of SE. $\frac{1}{4}$ .....	840.00	-----
32	NE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ .....	420.00	-----
	N. $\frac{1}{2}$ of SW. $\frac{1}{4}$ .....	866.00	-----
35	NE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ .....	394.00	-----
36	W. $\frac{1}{2}$ of SE. $\frac{1}{4}$ .....	1,312.00	-----
	SE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ .....	525.00	-----
	Lots 3 and 4.....	788.00	300.00
25	W. $\frac{1}{2}$ of NW. $\frac{1}{4}$ .....	709.00	-----
	NW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ .....	(1)	-----
	Lot 2.....	394.00	300.00

## TOWNSHIP 162 NORTH, RANGE 34 W., 5.

7	E. $\frac{1}{2}$ of NW. $\frac{1}{4}$ .....	\$720.00	-----
	Lots 1 and 2.....	720.00	\$150.00
18	SW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ .....	1,200.00	-----
	N. $\frac{1}{2}$ of NE. $\frac{1}{4}$ .....	720.00	-----
	E. $\frac{1}{2}$ of NW. $\frac{1}{4}$ .....	780.00	-----
19	NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ .....	600.00	150.00

## TOWNSHIP 163 NORTH, RANGE 34 W., 5.

11	SE. $\frac{1}{4}$ .....	\$1,512.00	-----
12	SW. $\frac{1}{4}$ .....	1,512.00	\$210.00
13	NE. $\frac{1}{4}$ .....	1,512.00	-----
16	W. $\frac{1}{2}$ of NE. $\frac{1}{4}$ .....	756.00	150.00
	N. $\frac{1}{2}$ of SE. $\frac{1}{4}$ .....	756.00	-----
26	N. $\frac{1}{2}$ of SW. $\frac{1}{4}$ .....	756.00	-----
27	NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ .....	378.00	-----
	E. $\frac{1}{2}$ of SE. $\frac{1}{4}$ .....	864.00	105.00
28	E. $\frac{1}{2}$ of NW. $\frac{1}{4}$ .....	864.00	-----
	SW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ .....	432.00	-----
	NW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ .....	432.00	-----
	N. $\frac{1}{2}$ of NE. $\frac{1}{4}$ .....	756.00	-----

<sup>1</sup> No assessed value. Adjoining land, \$525.

## TOWNSHIP 163 NORTH, RANGE 34 W., 5—Continued.

Section.	Part.	Value of land.	Value of improvements.
31	SW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ .....	\$378.00	.....
	NW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ .....	378.00	.....
	SE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ .....	432.00	\$150.00
35	S. $\frac{1}{4}$ of SE. $\frac{1}{4}$ .....	999.00	.....
	NE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ .....	432.00	.....
	NW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ .....	432.00	.....
36	SW. $\frac{1}{4}$ .....	1,512.00	150.00
	NW. $\frac{1}{4}$ .....	1,512.00	150.00

## TOWNSHIP 163 NORTH, RANGE 33 W., 5.

29	NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ .....	\$600.00	\$15.00
	NE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ .....	500.00	50.00
28	NW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ .....	400.00	.....
	N. $\frac{1}{2}$ of SW. $\frac{1}{4}$ .....	900.00	.....

## MEMORANDUM OF DEEDS FROM REGISTRY OFFICE FOR BELTRAMI COUNTY.

(By Mr. LAIRD, EXHIBIT 7.)

Date.	Parties.	Land.	Consideration.	Price per acre.
Sept. 9, 1914	Lars Nilson to First State Bank of Beaudette.	SE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ sec. 10; NW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ , S. $\frac{1}{2}$ of SW. $\frac{1}{4}$ , sec. 11, 161-32 W., 5. 160 acres.	<sup>1</sup> \$200.00	\$1.25
Mar. 2, 1914	Victor Gordhamer to Oliver Halvorson.	E. $\frac{1}{2}$ of NW. $\frac{1}{4}$ sec. 15; S. $\frac{1}{2}$ of SW. $\frac{1}{4}$ sec. 10, 161-32 W., 5. 160 acres.	<sup>2</sup> 1,200.00	9.68
July 25, 1914	John B. Gauthier to John Franson.	S. $\frac{1}{2}$ of NW. $\frac{1}{4}$ , SW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ and lot 1, sec. 12, 161-32 W., 5. 159.85 acres.	1,400.00	8.75
Jan. 3, 1914	Jorgen Johnson to Charley Miller.	W. $\frac{1}{2}$ of SE. $\frac{1}{4}$ , SE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ and lots 3 and 4, sec. 36, 162-32 W., 5. 157 acres.	1,900.00	12.10
May 8, 1915	Ole G. Rohne to Oscar and Swan Smith.	E. $\frac{1}{2}$ of SE. $\frac{1}{4}$ , sec. 31; N. $\frac{1}{2}$ of SW. $\frac{1}{4}$ , sec. 32, 162-32 W., 5. 160 acres.	700.00	4.37
June 16, 1915	P. F. Fogarty et al. to John Carlson.	E. $\frac{1}{2}$ of SW. $\frac{1}{4}$ , sec. 20; NE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ , NW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ , sec. 29, 162-32 W., 5. 160 acres.	885.00	5.53
Apr. 9, 1914	Peter S. Nelson to Robert M. Skinner.	W. $\frac{1}{2}$ of NW.—NW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ , lot 2, sec. 25, 162-32 W., 5. 154.9 acres.	1,175.00	7.58
Mar. 24, 1915	Frank N. Truax et al. to Frank J. Zervas.	E. $\frac{1}{2}$ of NW. $\frac{1}{4}$ , W. $\frac{1}{2}$ of NE. $\frac{1}{4}$ , sec. 8, 162-33. 160 acres.	1,400.00	8.75
Mar. 30, 1914	Gust. Starren to Emma Sundholm.	SW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ , sec. 15, 162-33 W., 5. 40 acres.	350.00	8.75
Dec. 22, 1914	Burgie W. Mayden et al. to Frederick Aichele.	NW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ sec. 21, 162-33 W., 5. 40 acres.	100.00	2.50
Jan. 26, 1914	Elias Sundholm et al. to O. R. Anderson et al.	NE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ , S. $\frac{1}{2}$ of SE. $\frac{1}{4}$ , sec. 22; NW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ sec. 27, 162-33. 160 acres.	2,500.00	15.60
Oct. 19, 1915	Jacob Brynildsen et al. to Alton Crosby.	W. $\frac{1}{2}$ of SW. $\frac{1}{4}$ sec. 26; NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 35; NE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ sec. 27, 162-33 W., 5. 160 acres.	500.00	3.15
Jan. 29, 1914	Irving Nord to Niles Abel.....	W. $\frac{1}{2}$ of NE. $\frac{1}{4}$ , E. $\frac{1}{2}$ of NW. $\frac{1}{4}$ , sec. 28, 162-33. 160 acres.	1,600.00	10.00
Mar. 16, 1915	A. E. Abel to Rich. Olson.....	E. $\frac{1}{2}$ of NW. $\frac{1}{4}$ , and lots 1 and 2, sec. 7, 162-34. 161.8 acres.	500.00	3.13
Dec. 9, 1915	Chas. A. Farel et al. to J. C. Olson et al.	N. $\frac{1}{2}$ of NE. $\frac{1}{4}$ , E. $\frac{1}{2}$ of NW. $\frac{1}{4}$ , sec. 18, 162-34. 160 acres.	2,500.00	15.63
Nov. 10, 1915	G. Roen et al. to C. Paulseth....	SW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ sec. 18; NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 19, 162-34. 80 acres.	200.00	2.50
Dec. 18, 1915	Ole G. Tollefsind to T. A. Kingland.	SE. $\frac{1}{4}$ sec. 11, 163-34. 160 acres....	1,000.00	6.25
Mar. 13, 1915	John Swenson to Wm. S. Stone..	NE. $\frac{1}{4}$ sec. 13, 163-34. 160 acres....	1,400.00	8.75
July 8, 1914	Ruric H. Johnson to Agnes O. Arnesen.	W. $\frac{1}{2}$ of NE. $\frac{1}{4}$ , N. $\frac{1}{2}$ of SE. $\frac{1}{4}$ , sec. 16, 163-34. 160 acres.	<sup>1</sup> 1,600.00	13.44
Oct. 7, 1914	A. A. Robberstad et al. to Halvor Robberstad.	N. $\frac{1}{2}$ of SW. $\frac{1}{4}$ sec. 26; E. $\frac{1}{2}$ of SE. $\frac{1}{4}$ sec. 27, 163-34. 160 acres.	1,600.00	13.13
Apr. 5, 1915	Lucas Kleven to H. M. Gudvangan.	NE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ , N. $\frac{1}{2}$ of SE. $\frac{1}{4}$ sec. 34; NW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ sec. 35, 163-34. 160 acres.	2,400.00	15.00
Feb. 11, 1914	Emma Price et al. to Ida McClintock.	NW. $\frac{1}{4}$ sec. 36, 163-34. 160 acres....	1,200.00	7.50

<sup>1</sup> And mortgage, \$551.85.<sup>2</sup> And mortgage, \$550.

# MEMORANDUM OF SEARCHES IN REGISTRY OFFICE FOR BELTRAMI COUNTY.

Date.	Parties.	Land.	Consideration.	Price per acre.
Oct. 2, 1913	Gilbert Nelson to Emil Oksanen.	Part of sec. 12, 161-32 W., 5. 39 acres.	\$500.00	\$12.82
May 15, 1913	Margaret Donahue to James W. Bronson.	E. $\frac{1}{2}$ of SE. $\frac{1}{4}$ sec. 19; W. $\frac{1}{2}$ of SW. $\frac{1}{4}$ sec. 20, 162-32 W., 5. 160 acres.	500.00	3.15
Nov. 15, 1913	A. J. Skobba et al. to E. F. Smith or Nelson.	S. $\frac{1}{2}$ of SW. $\frac{1}{4}$ sec. 29; SE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ sec. 30; NE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 32, 162-32. 160 acres.	950.00	5.95
June 2, 1913	F. O. Gustner et al. to Herman C. Luedtke.	W. $\frac{1}{2}$ of NW. $\frac{1}{4}$ sec. 13; SE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ ; NE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ sec. 14, 162-33 W., 5. 160 acres.	1,000.00	6.25
Oct. 25, 1913	James W. King to Jos. and John Meloney.	SW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ ; S. $\frac{1}{2}$ of NW. $\frac{1}{4}$ ; NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 16, 162-33. 160 acres.	1,200.00	7.50
June 11, 1913	A. Lindquist et al. to And. P. Peterson.	SE. $\frac{1}{4}$ sec. 16, 162-33 W., 5. 160 acres.	1,000.00	6.25
Nov. 5, 1913	Agnes C. Anderson to Andrew Lofotedt.	NW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ and N. $\frac{1}{2}$ of SW. $\frac{1}{4}$ sec. 28; NE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ sec. 29, 163-33. 160 acres.	1,000.00	6.25
May 27, 1913	Thomas Melby to Tobias Thompson.	NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 29, 163-33. 40 acres.	200.00	5.00
Mar. 20, 1913	Sarah M. Servis to Oscar M. Servis.	SW. $\frac{1}{4}$ sec. 12, 163-34 W., 5. 160 acres.	300.00	1.88
Aug. 2, 1913	Jas. A. Kelly et al. to N. C. Hamilton.	N. $\frac{1}{2}$ of NE. $\frac{1}{4}$ ; SW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ sec. 25; NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 27, 163-34. 160 acres.	800.00	5.00
July 15, 1913	Otto Erickson to O. A. Westin.	E. $\frac{1}{2}$ of NW. $\frac{1}{4}$ ; SW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ ; NW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ sec. 28, 163-34. 160 acres.	1,500.00	9.38
Apr. 1, 1913	C. Lindman to O. H. Lindquist.	NW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ ; SE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ ; S. $\frac{1}{2}$ of SE. $\frac{1}{4}$ sec. 31, 163-34. 160 acres.	1,400.00	8.75
Nov. 19, 1913	H. Olson et al. to C. F. Dow.	SW. $\frac{1}{4}$ sec. 36, 163-34. 160 acres.	1,200.00	7.50

# MEMORANDUM OF DEEDS FROM REGISTRY OFFICE AT ROSEAU.

May 8, 1913	Charles F. Holmsten to Thomas J. Burton.	SE. $\frac{1}{4}$ sec. 32, 162-35 W., 5. 160 acres.	\$750.00	\$4.63
Dec. 22, 1915	Daniel K. Smith to William Muller.	SW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ sec. 25, 162-35 W., 5. 40 acres.	1,000.00	25.00
Nov. 24, 1915	Henry M. Rhodes to Fred Nord.	NE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ sec. 21, NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 22, and S. $\frac{1}{2}$ of NW. $\frac{1}{4}$ sec. 22, 162-35 W., 5. 160 acres.	<sup>1</sup> 1,500.00	12.50
Mar. 30, 1915	First State Bank of Roosevelt to John J. Catlin.	NW. $\frac{1}{4}$ sec. 13, 162-35 W., 5. 160 acres.	1,600.00	10.00
Jan. 11, 1913	Lewis Chequin to Albert P. Boyd.	NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 12; N. $\frac{1}{2}$ of NE. $\frac{1}{4}$ ; SW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ sec. 11, 162-35 W. 5. 160 acres.	1,500.00	9.37
Apr. 26, 1912	Knut Stalheim to Carl E. Carlquist and Jones P. Landbeck.	W. $\frac{1}{2}$ of SW. $\frac{1}{4}$ ; SE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ sec. 9, 162-35 W., 5. 160 acres.	500.00	4.16
July 24, 1912	Per O. Tornblom to Carl E. Carlquist and Jones P. Landbeck.	E. $\frac{1}{2}$ of NE. $\frac{1}{4}$ ; SW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ ; NE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ sec. 7, 162-35 W., 5. 160 acres.	<sup>1</sup> 700.00	7.50
Dec. 26, 1914	Emma C. Johnson to Fred S. Foster.	Lot 2 and SW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ sec. 3, 162-35 W., 5. 80 acres.	800.00	10.00
Apr. 20, 1914	Emma Nei to R. A. Sperling.	S. $\frac{1}{2}$ of NE. $\frac{1}{4}$ and NE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ sec. 33; SW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 34, 163-36 W., 5. 160 acres.	3,500.00	21.87
July 12, 1912	Edward McCagherty to Thos. J. McCagherty.	Lots 3 and 4, sec. 3-162 N., E. $\frac{1}{2}$ of SW. $\frac{1}{4}$ sec. 34, 163-36 W., 5. 159.58 acres.	<sup>2</sup> 3,000.00	25.00
Dec. 5, 1914	Thos. L. Jones to Janet Hunter.	W. $\frac{1}{2}$ of SW. $\frac{1}{4}$ sec. 33, 163-36 W., 5. 46 acres. R. of w.	2,250.00	48.91
June 22, 1915	Warroad Land & Inv. Co. to E. B. Peterson and Henry W. Moorhead.	SW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ sec. 32, 163-36 W., 5. 9 acres. R. of w.	2,010.00	223.33
Aug. 20, 1913	Severt A. Selvig to Helena K. Comlins.	Lots 5 and 6, sec. 31, 163-36 W., 5. 160 acres.	1,500.00	18.75
Mar. 3, 1913	I. Vanderbleek to Maude E. Field.	SE. $\frac{1}{2}$ of NW. $\frac{1}{4}$ ; E. $\frac{1}{2}$ of SW. $\frac{1}{4}$ ; SW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ sec. 31, 163-36 W., 5. 160 acres.	<sup>3</sup> 3,200.00	26.50
May 10, 1913	David M. Roberts to Mattie J. Roberts.	Part SW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ sec. 163-36 W., 5. 14 acres.	300.00	21.43
Mar. 2, 1914	Felix Fournet to J. Capistran and L. Capistran.	NE. $\frac{1}{4}$ sec. 18, 163-36 W., 5. 160 acres.	2,400.00	15.00

<sup>1</sup> And mortgage, \$500.<sup>2</sup> And mortgage, \$1,000.<sup>3</sup> And mortgage, \$1,042.



## Memorandum of deeds from registry office at Roseau—Continued.

Date.	Parties.	Land.	Consideration.	Price per acre.
May 21, 1915	Chas. F. McLean to Ole S. Swanson.	SE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ , NE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ , and lots 5 and 6, sec. 6, 162-36 W., 5.	\$1,000.00	\$6.25
May 18, 1915	Edward Foss to F. Edwards....	SE. $\frac{1}{4}$ sec. 34, 162-36 W., 5. ....	<sup>1</sup> 500.00	3.12
June 24, 1913	Commodore P. Jones to Frank P. Runger.	E. $\frac{1}{2}$ of NW. $\frac{1}{4}$ , W. $\frac{1}{2}$ of NE. $\frac{1}{4}$ , sec. 29, 162-36 W., 5. 160 acres.	<sup>2</sup> 2,650.00	22.81
Sept. 16, 1915	E. J. Stegner to Arthur Brown..	SW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ sec. 21; NW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ sec. 28, 162-36 W., 5. 80 acres.	1,180.00	14.75
Dec. 15, 1915	Herb. Halverson to Ray and Carrie Stewart.	N. $\frac{1}{4}$ of NW. $\frac{1}{4}$ , SE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ , SW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ , sec. 28, 162-36 W., 5. 160 acres.	3,500.00	21.87
Oct. 27, 1913	Arthur E. Brandt to David Altizer.	SW. $\frac{1}{4}$ of SW. $\frac{1}{4}$ sec. 22; W. $\frac{1}{2}$ of NW. $\frac{1}{4}$ sec. 27; SE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ sec. 28, 162-36 W., 5. 160 acres.	1,000.00	10.00
Nov. 16, 1915	R. Demorris to James Mentor....	S. $\frac{1}{2}$ of NW. $\frac{1}{4}$ , N. $\frac{1}{2}$ of SW. $\frac{1}{4}$ , sec. 26, 162-36 W., 5. 160 acres.	1,500.00	9.37
Apr. 21, 1915	Arnold Schutz to Jessie F. Bruce.	Part N. $\frac{1}{2}$ of NW. $\frac{1}{4}$ sec. 26, 162-36 W., 5.	800.00	10.00
Dec. 11, 1914	And. Elliott to John Hector.....	SW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ , NW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ , sec. 22, 162-36 W., 5. 80 acres.	700.00	8.75
Dec. 30, 1915	David Ireland to Ambrose Engel.	SE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 21, 162-36 W., 5. 40 acres.	<sup>3</sup> 1,000.00	30.00
Dec. 23, 1915	George G. Marvin to the Algoma Farm Land Co.	NE. $\frac{1}{4}$ sec. 21, 161-36 W., 5; SW. $\frac{1}{4}$ sec. 11, 162-36 W., 5. 320 acres. One-third interest.	<sup>4</sup> 200.00	6.56
Dec. 22, 1913	The Realty Adjustment Co. to Charlotte Norton.	S. $\frac{1}{2}$ of SW. $\frac{1}{4}$ sec. 15; NE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ sec. 21; NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 22, 162-36 W., 5. 160 acres.	1,000.00	6.25
Apr. 26, 1915	Swan Haakonson to John R. O'Donnell.	S. $\frac{1}{2}$ of NE. $\frac{1}{4}$ sec. 20, 162-36 W., 5. 80 acres.	<sup>5</sup> 1,000.00	17.50
Aug. 9, 1913	Ralph Dowsland to Fred Springhorn.	E. $\frac{1}{2}$ of NW. $\frac{1}{4}$ , NE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ , NW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ , sec. 17, 162-36 W., 5. 160 acres.	1,800.00	11.25
Dec. 23, 1915	Geo. G. Marvin to The Algoma Farm Land Co.	One-third of NW. $\frac{1}{4}$ and NE. $\frac{1}{4}$ sec. 16, 162-36 W., 5. 320 acres.	406.00	3.80
Mar. 25, 1914	Ray B. MacLean to Stella Whaley.	SW. $\frac{1}{4}$ , sec. 16, 162-36 W., 5. 160 acres.	2,100.00	13.12
July 30, 1913	State Bank of Warroad to Sivert A. Selvog.	W. $\frac{1}{2}$ of NW. $\frac{1}{4}$ , N. $\frac{1}{2}$ of SW. $\frac{1}{4}$ , sec. 15, 162-36 W., 5. 160 acres.	3,000.00	18.75
July 22, 1914	Julia Lunde to Anna Knudson..	SE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ , NE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ , sec. 13, 162-36 W., 5. 80 acres.	<sup>6</sup> 1,000.00	16.25
Oct. 3, 1914	John A. Larson to John I. Farley.	NE. $\frac{1}{4}$ sec. 10, 162-36 W., 5. ....	2,000.00	12.50
Mar. 23, 1915	Ben. F. Elliott to Fred Springhorn.	E. $\frac{1}{2}$ of SW. $\frac{1}{4}$ , W. $\frac{1}{2}$ of SE. $\frac{1}{4}$ , sec. 8, 162-36 W., 5. 160 acres.	<sup>2</sup> 2,000.00	18.75
May 8, 1914	T. F. Spreiter to M. Stoskopf....	S. $\frac{1}{2}$ of SE. $\frac{1}{4}$ , SE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ , and lot 4, sec. 7, 162-36 W., 5.	4,000.00	25.00
Nov. 27, 1914	Albert Berg to Geo. D. Eygbroad.	E. $\frac{1}{2}$ of SE. $\frac{1}{4}$ , sec. 6; N. E. $\frac{1}{4}$ and N. $\frac{1}{2}$ of SE. $\frac{1}{4}$ , sec. 7, 162-36 W., 5. 320 acres.	16,000.00	50.00
Mar. 13, 1914	J. Robillard to Thos. Galant....	One half interest in E. $\frac{1}{2}$ of SW. $\frac{1}{4}$ , and lots 6 and 7, sec. 6, 162-36 W., 5. 160 acres.	<sup>7</sup> 1,100.00	16.87
Mar. 30, 1914	Veronique Neal to A. Osterberg.	Lot 4 (NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ ); SW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ , sec. 5; lot 1 (NE.—NE.—); SE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ , sec. 6, 162-36 W., 5. 160.15 acres.	2,400.00	15.00
July 1, 1914	Thos. L. Jones and T. Lawson to Martin Bengtson.	W. $\frac{1}{2}$ of SE. $\frac{1}{4}$ , SE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ , and lot 2, sec. 6, 162-36 W., 5. 160.09 acres.	1,600.00	10.00
Nov. 26, 1915	O. B. Ekman to Hans. R. Selvog.	Part lot 1 and SE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ , sec. 4, 162-36 W., 5. Rly. R. of w. 46 acres.	<sup>8</sup> 1,350.00	44.56
June 24, 1913	T. Lawson to Hans R. Selvog....	S. $\frac{1}{2}$ of NW. $\frac{1}{4}$ , S. $\frac{1}{2}$ of NE. $\frac{1}{4}$ , sec. 3, 162-36 W., 5. 160 acres.	<sup>1</sup> 2,000.00	12.50
Feb. 14, 1914	T. J. McCagherty to Hans R. Selvog.	Lots 3 and 4, sec. 3, 162-36 W., 5. 80 acres.	<sup>7</sup> 1,500.00	25.00
Oct. 1, 1912	Rosa H. May to Christina Selvog.	S. $\frac{1}{2}$ of NW. $\frac{1}{4}$ , and lots 3 and 4, sec. 2, 162-36 W., 5. 160 acres.	1,500.00	9.37
April 14, 1915	Chas. Olson to Wm. H. Prelvitz.	Part SE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ sec. 33, and SW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ , sec. 34, 163-37 W., 5. 35 acres.	166.00	4.74
Sept. 12, 1913	State Bank of Warroad to Nils Bengtsson.	SE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ , NE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ , sec. 11, 162-37 W., 5. 80 acres.	640.00	8.00
Jan. 12, 1914	Wells & Jibbey Co. to C. L. Hillton and Axel Eberhart.	SW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ , N. $\frac{1}{2}$ of NE. $\frac{1}{4}$ , NE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ , sec. 11, 162-37 W., 5. 160 acres.	2,000.00	12.50

<sup>1</sup> And mortgage.<sup>2</sup> And mortgage, \$1,000.<sup>3</sup> And mortgage, \$200.<sup>4</sup> And mortgage, \$1,500.<sup>5</sup> And mortgage, \$400.<sup>6</sup> And mortgage, \$300.<sup>7</sup> And mortgage, \$500.<sup>8</sup> And mortgage, \$700.

## Memorandum of deeds from registry office at Roseau—Continued.

Date.	Parties.	Land.	Consideration.	Price per acre.
Nov. 9, 1915	Leo Hoyez to Calvin Foster....	SE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ , SW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ , NE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ , NW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ , sec. 10, 162-37 W., 5. 160 acres.	\$775.00	\$4.84
Oct. 23, 1913	Fred J. Hoyez to John C. Craig..	SE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ , sec. 3; NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ , sec. 10, 162-37 W., 5. 80 acres.	550.00	6.87
Dec. 15, 1914	Carolyn Siers to Patrick H. Hynes.	S. $\frac{1}{2}$ of NW. $\frac{1}{4}$ , N. $\frac{1}{2}$ of SW. $\frac{1}{4}$ , sec. 29, 162-35 W., 5. 160 acres.	800.00	5.00
Do.....	Vincent Siers et al. to Patrick H. Hynes.	S. $\frac{1}{2}$ of NE. $\frac{1}{4}$ , N. $\frac{1}{2}$ of SE. $\frac{1}{4}$ , sec. 29, 162-35. 160 acres.	700.00	4.37
Dec. 31, 1914	J. F. Hall et al. to W. J. West...	One-half interest in E. $\frac{1}{2}$ of NE. $\frac{1}{4}$ sec. 27, 162-35.	400.00	10.00
Mar. 12, 1914	Mary J. Rhodes et al. to John J. Smrstik.	NW. $\frac{1}{4}$ sec. 23, 162-35 W., 5. 160 acres.	1,600.00	10.00
May 29, 1914	L. A. W. Tweeddale et al. to Christin C. Houtved.	SW. $\frac{1}{4}$ sec. 23, 162-35 W.....	748.00	4.67
June 15, 1914	F. G. Nelson et ux to Henry Gudvangen.	W. $\frac{1}{2}$ of NE. $\frac{1}{4}$ , N. $\frac{1}{2}$ of SE. $\frac{1}{4}$ , sec. 13, 162-35. 160 acres.	1,900.00	7.50
Mar. 31, 1915	Jos. Rebaauer to Gunder and Ole Hanson.	SW. — sec. 5, 162-35 W., 5. 160 acres.	<sup>2</sup> 1,000.00	9.37
Dec. 1, 1913	Jos. A. Bisbey et al. to Neil O'Donnell.	NW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ , NE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ , sec. 31, 162-36. 80 acres.	1,000.00	12.50
Do.....	Jos. A. Bisbey et al. to Peter Myers.	SE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ , NE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ , sec. 31, 162-36. 80 acres.	700.00	8.75
Oct. 12, 1914	Wm. Diedrich et al. to Herbert Ward.	N. $\frac{1}{2}$ of SE. $\frac{1}{4}$ , NE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ , sec. 19, 162-36. 120 acres.	1,500.00	12.50
Dec. 1, 1913	H. A. Youngberg to F. W. Youngberg and A. E. Youngberg.	SW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 13; SE. $\frac{1}{4}$ of NE. $\frac{1}{4}$ , E. $\frac{1}{2}$ of SE. $\frac{1}{4}$ , sec. 14, 162-37. 160 acres.	1,200.00	7.50
Feb. 10, 1914	John Paulson et al. to A. O. Eberhart and O. P. B. Jacobson.	NW. $\frac{1}{4}$ sec. 12, 162-37 W., 5. 160 acres.	2,400.00	15.00
Aug. 25, 1914	Bessie D. Hayes et al. to Charlotte Smith.	One-half of S. $\frac{1}{2}$ of SE. $\frac{1}{4}$ sec. 11; NE. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 14; NW. $\frac{1}{4}$ of NE. $\frac{1}{4}$ , 162-37.	<sup>3</sup> 1,000.00	17.50
Oct. 13, 1914	Bessie D. Hayes et al. to Wm. F. Williams.	One-half of N. $\frac{1}{2}$ of SW. $\frac{1}{4}$ , SE. $\frac{1}{4}$ of SW. $\frac{1}{4}$ , NW. $\frac{1}{4}$ of SE. $\frac{1}{4}$ , sec. 11, 162-37.	800.00	15.00
Oct. 12, 1914	A. Carriere to John A. Balfour...	SE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ sec. 9; S. $\frac{1}{2}$ of SW. $\frac{1}{4}$ sec. 10; NW. $\frac{1}{4}$ of NW. $\frac{1}{4}$ sec. 15, 162-37. 160 acres.	900.00	5.62
Dec. 3, 1914	D. Galipeau et al. to Max Sigel..	S. $\frac{1}{2}$ of NE. $\frac{1}{4}$ , lots 1 and 2, sec. 2, 162-37 W., 5.	<sup>1</sup> 1,000.00	8.50
Nov. 6, 1914	Chas. Hoyez et al. to Leo Hoyez..	SW. $\frac{1}{4}$ sec. 1, 162-37 W., 5.....	2,500.00	15.62
Oct. 15, 1914	S. H. Withey et al. to A. Carriere.	E. $\frac{1}{2}$ of SE. $\frac{1}{4}$ of SE. $\frac{1}{4}$ sec. 32, 163-36.	720.00	26.00
Jan. 8, 1914	Security State Bank of Warroad to Eva Dufault.	5 acres of SE. $\frac{1}{4}$ sec. 32, 163-36.....	250.00	50.00
Apr. 27, 1914	Security State Bank of Warroad to Euclid Dufault.	.....do.....	250.00	50.00
Jan. 14, 1914	Security State Bank of Warroad to Jos. Melancon.	10 acres of SE. $\frac{1}{4}$ sec. 32, 163-36 W., 5	500.00	50.00
Jan. 9, 1914	Security State Bank of Warroad to Frank Decker.	5 acres of SE. $\frac{1}{4}$ sec. 32, 163-36 W., 5.	250.00	50.00
Jan. 7, 1914	Security State Bank of Warroad to Leo Hoyez.	10 acres of SE. $\frac{1}{4}$ sec. 32, 163-36 W., 5.	500.00	50.00
Jan. 9, 1914	Security State Bank of Warroad to Hubert M. Hooper.	5 acres of SE. $\frac{1}{4}$ sec. 32, 163-36 W., 5.	250.00	50.00

<sup>1</sup> And mortgage, \$300.<sup>2</sup> And mortgage, \$500.<sup>3</sup> And mortgage, \$800.<sup>1</sup> And mortgage, \$360.

## I N D E X .

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- Agricultural lands, 81, 83.  
Appraisals of State flowage lands, St. Louis country, 5-20; Koochiching County, 21-38.  
Ash Rapids cofferdam, 75.  
Backus, E. W., contracts with Ontario Government, 61-74.  
Beltrami County, memorandum of deeds, 93.  
Canadian water-power regulations, 90.  
Canal at Fort Frances, 72.  
Chippewa Indian lands, 90.  
Derby, G. McC., report of Warroad Harbor, 78.  
Draft of steam vessels, 3.  
Drainage survey of Minnesota lands, 90.  
Dunn, Thomas H., memorandum on land areas and values, Lake of the Woods, 80-90.  
Fishways in dam at Fort Frances, 72.  
Gould, H. C., memorandum re Lake of the Woods levels, 75-80.  
Grand du Bonnet Falls, power development, 61.  
Holdahl, S. T., evidence as to land values, 86, 88.  
Johnston, W. A., report, 81.  
Kabetogoma Lake, State lands on, 87-88.  
Keewatin Power Co., 75; contract, 76-77.  
Kelly, George H., on Lake of the Woods levels, 78.  
Kennedy's high-water marks, 3-4.  
Kettle Falls Dam, 62, 70-71.  
Kettle Falls district, State lands, 46-47.  
Koochiching County, appraisals of State lands, 21-38; sales of State lands, 39-43.  
Land areas, Lake of the Woods district, 80-90.  
Land values, Lake of the Woods district, 80-90.  
Levels of Lake of the Woods, 75-80, 82-83.  
Manitoba, value of lands, 90.  
Manitoba Electric & Gas Light Co., 50.  
Minnesota State lands, 44-45, 46-47; appraisals of, 5-20; 21-38; memorandum of sales of, 39-43; value of lands, 90.  
Norman Dam, 75-76, 80.  
Northwest Electric Co., 50.  
Ontario, value of lands, 90.  
Ontario & Minnesota Power Co., contracts, 61-74.  
Oswald, Wieland, evidence of, 86.  
Rainy Lake, control of water levels, 64.  
Rainy Lake district, State lands in, 44-45; private lands, 48-49; land values, 86.  
Rainy River, pollution of, prohibited, 72; laws relating to dam, 91.  
Ralph, George A., evidence of, 86-87.  
Rat Root River district, State lands in, 44-45; private lands, 48-49.  
Rollerway Dam, 75.  
Roseau County, memorandum of deeds, 94.  
St. Boniface, Manitoba, population of, 53.



- St. Louis County, appraisals of State lands, 5-20.  
Shunk, Francis R., report on Lake of the Woods levels, 77-78, 79-80.  
Steam vessels on Lake of the Woods, 3.  
Suburban Rapid Transit Co., 51.  
Thatcher, R. W., evidence as to vegetation, 86.  
Tonnage of Lake of the Woods shipping, 3.  
Warroad gauge, 75.  
Warroad Harbor, improvement of, 78.  
Water power at International Falls, equal division of, 69.  
Winnipeg, population of, 53; electric light and power rates, 56.  
Winnipeg Electric Railway Co., chronological history, 50-61; passengers carried, 54; mileage, 55; taxation, 55; pay rolls, 56; capital invested, 56; horsepower, etc., 57; number of employees, 57; hydroelectric plant, 58; steam plants, 58-59.  
Winnipeg Electric Street Railway Co., 50.  
Winnipeg General Power Co., 50.  
Winnipeg River Power Co., 52; water-power development, 59; capital invested, 59.  
Winnipeg River power development, 54-55, 58, 59-60.  
Winnipeg River Railway Co., 52.  
Winnipeg, Selkirk & Lake Winnipeg Railway Co., 51-52.  
Winnipeg Street Railway Co., 50.













